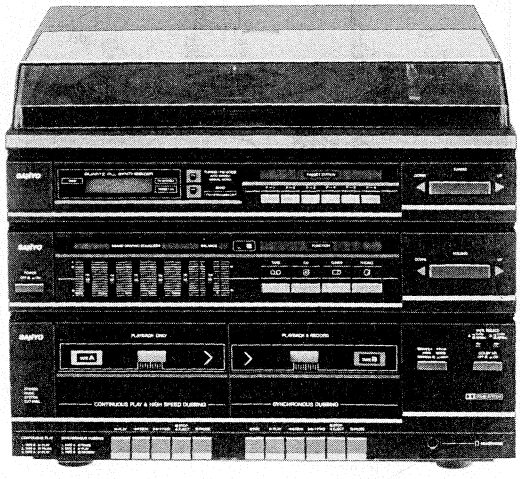
SANYO

Service Manual — Stereo Music System — GXT868L (W. GERMANY)



Specifications

PRODUCT CODE No.
129 298 06

Tuner section	
Frequency range	FM: 87.5–108.0MHz AM: 522–1611kHz
Turntable section	
Drive system	Belt drive, Semi-autol
Stylus	ST-868J (Magnet Moving type)
Cassette deck section	
Recording system	AC bias, 4-track stereo
Rewind and fast forward time	Approx. 120 sec. (C-60)
Wow and flutter	0.12% (WRMS)
General	
Output power	15W x 2 (at 8 ohms, 10% distortion)
Inputs	CD: 615 mV/47 kohms
Outputs	SPEAKERS: 8 ohms HEAD PHONES: 8 ohms
Power requirements	AC: 220V, 50Hz
Power consumption	85W
Dimensions (W x D x H)	Approx. 420 x 350 x 340 mm
Weight	Approx. 6.8kg

(RB 848 REMOTE CONTROLLER)

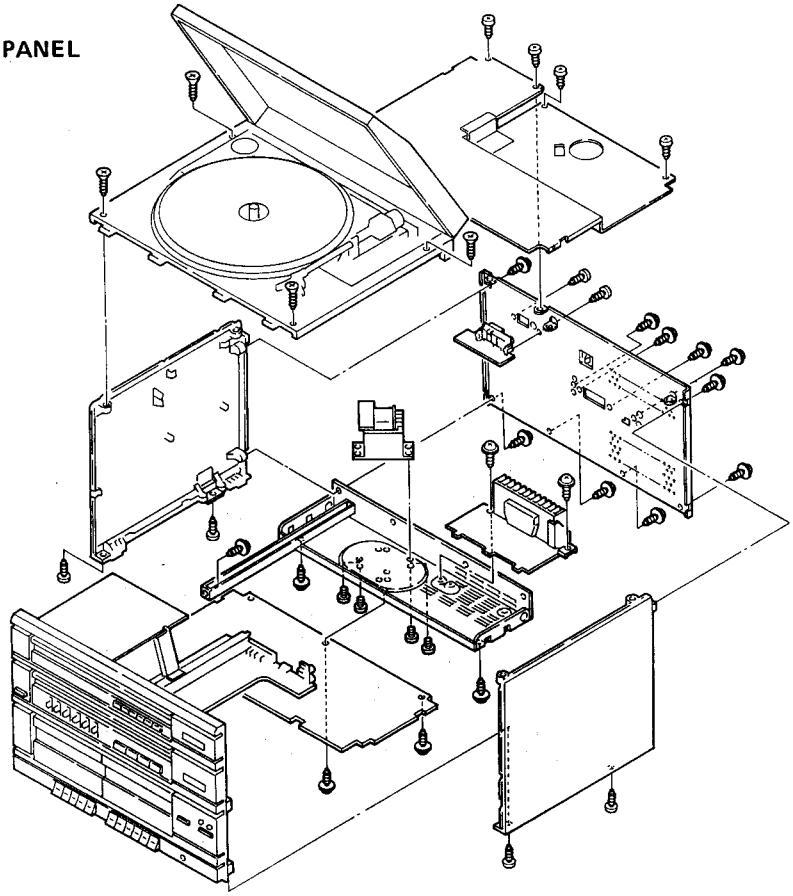
Power requirement	DC: 3V, "AA" battery x 2
Dimensions	Approx. 50 x 18 x 160 mm
Weight	Approx. 65g (without batteries)

Specification subject to change without notice.

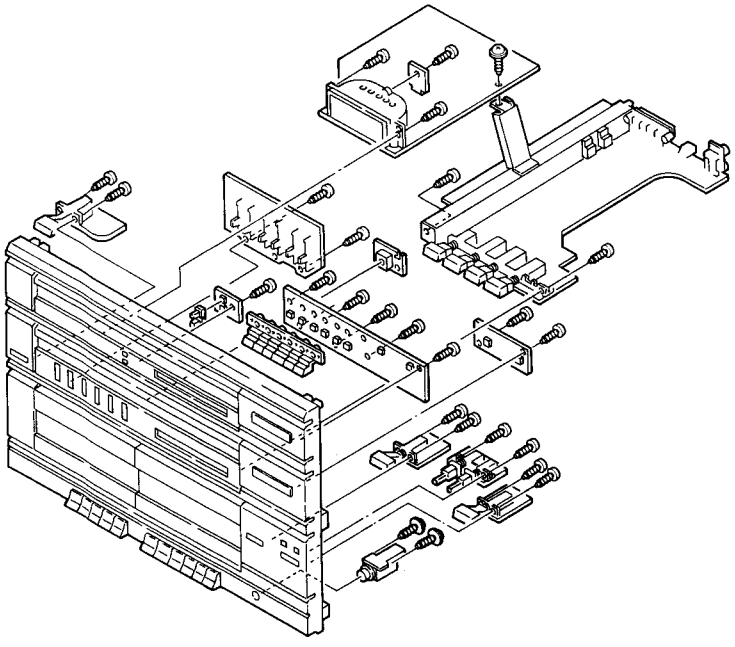
REFERENCE No. WM-580126

DISASSEMBLY

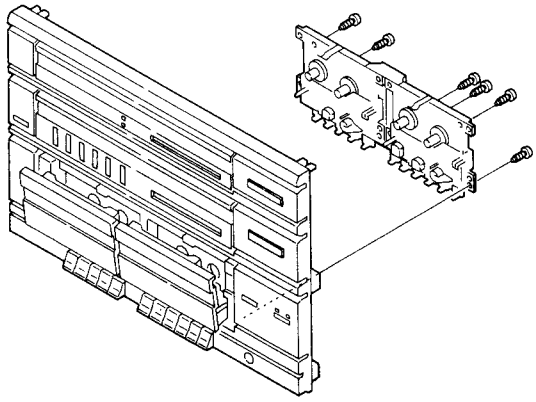
REMOVAL OF FRONT PANEL



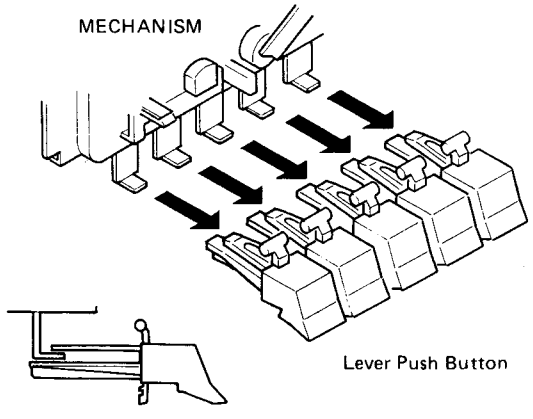
REMOVAL OF P.C. BOARD



REMOVAL OF MECHANISM



ASSEMBLE OF MECHANISM



ADJUSTMENT OF DECK & TORQUE

Amplifier Adjustment

	Item	Deck	Test Tape	Input	DOLBY SW.	Output	ADJUST POINT	Remarks
1	Head Azimuth	TAPE A TAPE B	VTT-658	–	OFF	DOLBY OUT	AZIMUTH SCREW	Adjustment to obtain maximum, right and left balanced output.
2	Playback Level	TAPE A	TCC-130 200nW/m	–	OFF	DOLBY OUT	SVR702 SVR802	Adjust to obtain 500mV on VTVM.
		TAPE B					SVR701 SVR801	
3	Rec/Play Level	TAPE B	AC-223	1kHz 40mV	ON	DOLBY OUT	SVR703 SVR803	Adjust to obtain 40mV on VTVM.
4	Rec/Play Frequency	TAPE B	AC-223	1kHz/10kHz 40mV	ON	DOLBY OUT	SVR704 SVR804	Adjust to obtain same output of 1kHz and 10kHz.

Note : Input : CD IN terminal

Tape Speed Adjustments DOLBY SW: OFF

Step	Speed	Deck	Test Tape	SVR	Tape Counter	Remarks
1	High	TAPE A	MTT-111 3000Hz	SVR601	2995~3005	Memorize the tape speed on counter. Comfirm that the speed of TAPE B is in –40~70Hz against TAPE A.
2	High	TAPE B			–40~70Hz	

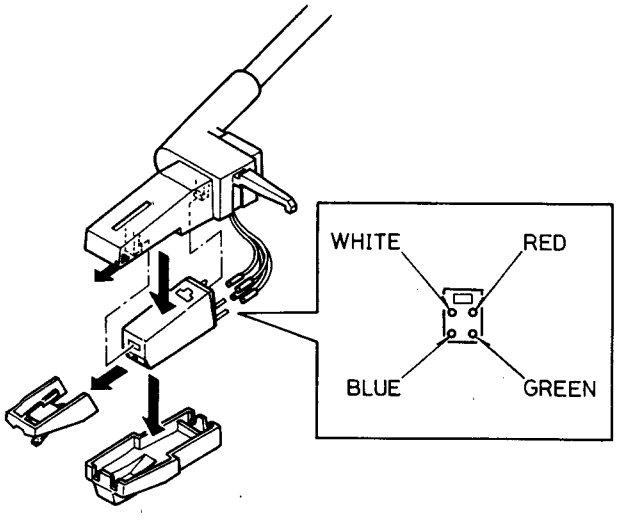
Notes:
1. For making adjustment of step 1, Set the TAPE B mechanism is record made with C-60 blank cassette tape.
2. Adjustment should be made at the ending portion of the tape.
3. Comfirm the indication of the tape speed for 2 second after adjustment has been made and adjusting driver has been removed from SVR.
4. For adjustment, use the screw driver with isolated tip from grip.

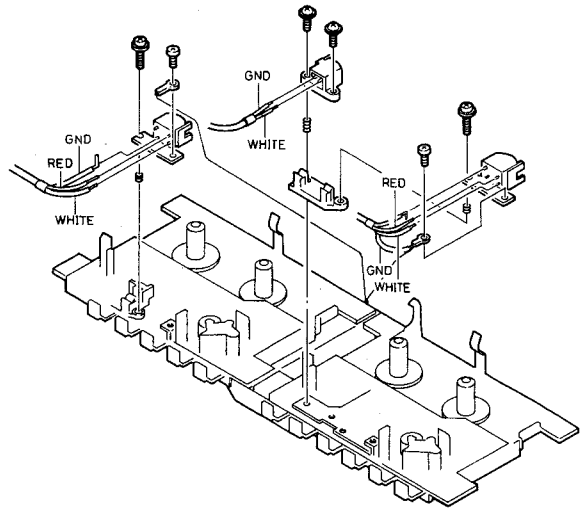
Torque Measurements

Note: Prior to measurement, clean the head, capstan and pinch roller.

Item	Take-up torque	Back tension	Pulley tension
Test cassette	PLAY: TW-2111 F.FWD/REW: TW-2231	PLAY/F.F: TW-2111 REW: Torque Gauge	Driving power cassette: TW-2412
PLAY	30 ~ 60 gr. cm	1.5 ~ 4.5 gr. cm	>60g
F. FWD	55 ~ 120 gr. cm	—	
REW	55 ~ 120 gr. cm	—	

REPLACEMENT OF CARTRIDGE & HEAD





ADJUSTMENT

NOTE: 1. Power source voltage is DC12V (AC220V,50Hz).
2. Use a screw driver with plastic grip for all adjustment.
3. Signal input must be kept as low as possible to avoid overload.
4. Use an output meter of the highest possible sensitivity.
5. Adjust the IF of AM & FM to the frequency of ceramic filter.

(1) FM Band Antenna: 75 ohm unbalanced, 75 ohm SG, standard modulation frequency: 1kHz, Deviation: ± 75 kHz (MONO)

ADJUSTMENT ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUSTING PARTS	STANDARDS
			MEASURING INSTRUMENTS	CONNECTIONS	MEASURING INSTRUMENTS	CONNECTIONS		
IF	V-curve	98.0 MHz	FM sweep generator (10.7 MHz non modulation)	TP100 (H) TP102 (E)	FM sweep generator	TP203 (H) TP102 (E)	T201	Ceramic filter
	S-curve					TP204 (H) TP102 (E)	T202	Symmetrical Wave Max.
Tuning Coverage	Low	87.5 MHz	—	—	Digital Voltmeter	TP101 (H) TP102 (E)	—	—
	High	108.0 MHz					L104	8.0 ± 0.05V
Tracking	Low	90.0 MHz	FM-SG (12 dB)	TP100 (H) TP102 (E)	VTVM Oscilloscope	Tuner out (L or R)	L101, L102	Max.
	High	106.0 MHz					CT101	
IF S-curve (Distortion factor)		98.0 MHz	FM-SG (66 dB)	TP100 (H) TP102 (E)	Digital Voltmeter	TP201 (H) TP202 (E)	T202	0±0.05V
S.D. (Station Detector)		98.0 MHz	FM-SG (26 dB)	TP100 (H) TP102 (E)	Digital Voltmeter	TP207 (H) TP102 (E)	SVR201	Less than 4V
VCO (19 kHz)		98.0 MHz	FM-SG (66 dB)	TP100 (H) TP102 (E)	Counter	TP301 (H) TP102 (E)	SVR302	19kHz±50Hz
Separation (Stereo mode)		98.0 MHz	FM-SG (66 dB) Stereo Modulator*	TP100 (H) TP102 (E)	VTVM Oscilloscope	Tuner out (L or R)	SVR301	L/R-ratio Max.

* Stereo modulator : Deviation Main (L + R) ..... ±22.5 kHz
Pilot (19kHz) .... ±6.75 kHz

(2) AM Band Antenna: IRE Loop antenna, Standard modulation: 1000 Hz, 30%

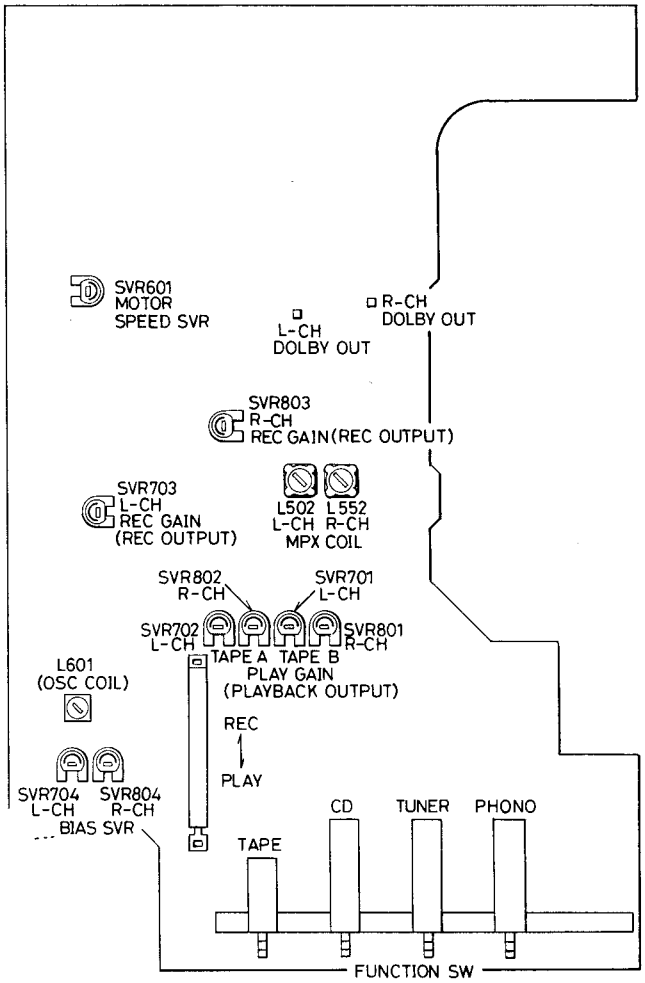
ADJUSTMENT ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUSTING PARTS	STANDARDS
			MEASURING INSTRUMENTS	CONNECTIONS	MEASURING INSTRUMENTS	CONNECTIONS		
IF		999 kHz	AM Sweep generator (459 kHz non modulation)	TP151 (H) TP152 (E)	AM sweep generator	TP206 (H) TP102(E)	T203	Max.
Tuning Coverage	Low	522 kHz	—	—	Digital Voltmeter	TP401 (H) TP152 (E)	L151	1.4 ± 0.03V
	High	1611 kHz					CT152	8.2 ± 0.05V
Tracking	Low	603 kHz	AM-SG (75 dB)	Loop ANT.	VTVM Oscilloscope	Tuner out (L or R)	L152	Max.
	High	1404 kHz					CT151	
S.D. (Station Detector)		999 kHz	AM-SG (86 dB)	Loop ANT.	Digital Voltmeter	TP207 (H) TP102 (E)	SVR202	Less than 4V

(3) LW Band Antenna: IRE Loop antenna, Standard modulation: 400 Hz, 30%

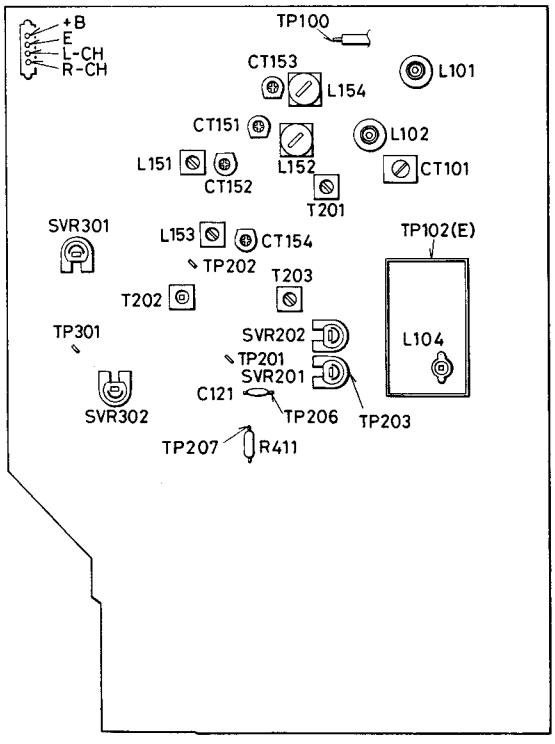
ADJUSTMENT ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUSTING PARTS	STANDARDS
			MEASURING INSTRUMENTS	CONNECTIONS	MEASURING INSTRUMENTS	CONNECTIONS		
Tuning Coverage	Low	144 kHz	—	—	Digital Voltmeter	TP401 (H) TP152 (E)	L153	1.6 ± 0.03V
	High	290 kHz					CT154	6.5 ± 0.1V
Tracking	Low	162 kHz	AM-SG (83 dB)	Loop ANT.	VTVM Oscilloscope	Tuner out (L or R)	L154	Max.
	High	279 kHz					CT153	

PARTS LOCATION

< AMP >



< TUNER >



PARTS LIST

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.

PACKING & ACCESSORIES

Ref. No.	Part No.	Description
	614 200 8621	INNER CORR CASE
	614 175 6073	FOAM PLASTIC CASE, TOP
	614 175 7339	FOAM PLASTIC CASE, BOTTOM
	614 176 8540	INNER POLYE LAMINA COVER, DUST COVER
	614 176 7024	INNER POLYE COVER, SET
	614 200 8768	INST MANUAL
	614 036 8963	LOOP ANT ASSY
	614 023 7344	ANT
	RB848(BK)/SS-	REMOTE CONTROLLER

CABINET & CHASSIS

Ref. No.	Part No.	Description
1	614 196 6342	FRONT PANEL ASSY
2	614 066 3624	BRACKET LID ASSY, TAPE A
3	614 066 3631	BRACKET LID ASSY, TAPE B
4	614 151 7254	SPRING COIL, BRACKET LID
5	614 069 0354	GEAR ASSY, DUMPER
6	614 135 1803	LEVER PUSH BUTTON, MECHANISM
7	614 113 7865	BRACKET, LEVER PUSH BUTTON
8	614 197 6617	STAND ASSY
9	614 105 2281	SLIDE KNOB, GEQ & BALANCE
10	614 065 9870	DUST COVER ASSY
11	614 112 3509	HINGE, DUST COVER
12	614 200 8355	BOTTOM LID
13	614 195 6817	DECK PANEL
14	614 076 9067	SIDE PANEL, RIGHT
15	614 076 9074	SIDE PANEL, LEFT
16	614 116 2041	REINFORCEMENT, MAIN PCB
17	614 200 8522	REINFORCEMENT, PT & BACK BOTTOM
18	614 105 6951	PUSH BUTTON, POWER/FUNCTION/DUBBING
19	614 152 1312	SPRING WIRE, R/P SELECT
20	614 199 2662	BRACKET, R/P SELECT
21	614 200 1325	BACK PANEL
22	614 129 1901	FIXER, AC CORD
23	614 098 9243	CUP KNOB, TUNING/VOLUME
24	614 105 6968	PUSH BUTTON, BAND/FM MODE
25	614 105 6975	PUSH BUTTON, PRESET
26	614 117 9988	REFLECTOR, LCD
27	614 084 9790	SIGN WINDOW, LCD
28	614 100 6161	PUSH BUTTON, TAPE SELECT
29	614 130 0382	LUG, LEAD RETAINER
30	614 120 9050	BRACKET SWITCH, STOP
31	614 113 7889	BRACKET, HEAT SINK
32	614 116 2096	REINFORCEMENT, FRONT-BACK
33	614 108 0307	BRACKET, LOOP ANT.
34	614 200 1783	BRACKET, TUNER PCB
35	614 208 0283	SHIELD, SHIELD PLATE (36)
36	614 200 1813	SHIELD PLATE, TOP COVER
37	614 200 1790	SHIELD PLATE
38	614 200 1806	SHIELD PLATE
39	614 203 1216	SHIELD PLATE
40	412 003 1906	SPECIAL SCREW, HEADPHONE & PLAYER MTG.
41	614 129 2496	FIXER

FIXING PARTS

Ref. No.	Part No.	Description
Y1	411 002 8503	SCR PAN 3X6
Y2	411 023 9800	SCR S-TPG PAN 3X8
Y3	411 021 6405	SCR S-TPG BIN 3X8
Y4	411 021 3503	SCR S-TPG BIN 3X10
Y5	411 020 9803	SCR S-TPG BRZ + FLG 3X6
Y6	411 020 9902	SCR S-TPG BRZ + FLG 3X8
Y7	411 020 8905	SCR S-TPG BRZ + FLG 3X10
Y8	411 022 3106	SCR S-TPG FLT 3X12
Y9	411 027 3101	SCR S-TPG BIN 3X8
Y10	411 001 4209	SCR S-TPG BIN 4X8
Y11	411 024 7607	SCR S-TPG TRS 3X10
Y12	411 027 1909	SCR S-TPG BIN 3X12
Y13	411 021 5705	SCR S-TPG BIN 3X6
Y14	411 022 2802	SCR S-TPG FLT 3X10

ELECTRICAL PARTS

Ref. No.	Part No.	Description
51	⚠ 614 023 3100	POWER CORD
or	⚠ 614 023 3148	POWER CORD
or	⚠ 614 023 3384	POWER CORD
52	⚠ 423 003 2404	FUSE 250V T0.4A (F901)
53	⚠ 614 200 9574	P.C BOARD, PRIMARY
54	⚠ 614 200 4036	P.T
55	614 199 9180	HEAT SINK, POWER IC
56	614 018 9315	SWITCH, STOP
57	⚠ 423 005 3607	FUSE 250V T1.6A (F701,F801)
58	614 203 2763	SOCKET, CD SYNCHRO
59	614 200 3800	SOCKET, R/P HEAD
60	614 200 3817	SOCKET, PLAY HEAD
61	614 200 3824	SOCKET, ERASE HEAD
62	614 200 3831	SOCKET, MECHANISM
63	614 129 9037	CORE

PRE/DECK AMP P.C.BOARD ASSY

Ref. No.	Part No.	Description
101	614 201 0792	P.C BOARD ASSY, PRE/DECK AMP
	614 121 6034	HEAT SINK
	614 017 8173	TERMINAL BOARD, EXT. SP
	614 017 6964	TERMINAL BOARD
	614 036 6372	SOCKET, 5P, PLAYER
or	614 195 4448	SOCKET
	614 020 2113	SOCKET, CD
	614 020 8849	SOCKET, 3P, VR OUT-SP IN
	614 020 8856	SOCKET, 4P, MOTOR-TUNER OUT
	614 020 6548	SOCKET, 2P
	614 020 6555	SOCKET, 3P
	614 020 6579	SOCKET, 5P
	614 020 6586	SOCKET, 6P

PARTS LIST

Ref. No.	Part No.	Description
	614 016 8112	PLUG, 6P, MECHANISM SW
	614 017 2096	PLUG, 2P, ERASE HEAD
	614 017 2102	PLUG, 3P, PLAY HEAD
	614 017 2102	PLUG, 3P, REC/PLAY HEAD
	614 016 8228	PLUG, 3P
	614 200 3770	SWITCH, REC/PLAY (S1)
	614 195 4417	SWITCH, FUNCTION (S5~S8)
	614 003 3250	SEMI VR, 10K (SVR701~703,SVR801~803)
or	614 006 9686	SEMI VR
L501	614 027 9221	CHOKE COIL
L502	614 029 3807	MX COIL, 85KHZ
L551	614 027 9221	CHOKE COIL
L552	614 029 3807	MX COIL, 85KHZ
L601	614 200 3787	OSC COIL
L702	614 027 8224	CHOKE COIL
L703	614 029 3142	MX COIL, 85KHZ
L802	614 027 8224	CHOKE COIL
L803	614 029 3142	MX COIL, 85KHZ
L901	614 028 6823	FILTER, 47UH
SVR601	614 003 3229	SEMI VR, 2K, MOTOR SPEED
or	614 006 9662	SEMI VR
SVR704	614 003 3298	SEMI VR, 100K, R/P FREQ. LEFT
or	614 006 9716	SEMI VR
SVR804	614 003 3298	SEMI VR, 100K, R/P FREQ. RIGHT
or	614 006 9716	SEMI VR
IC501	409 119 9803	IC CXA1101P
IC601	409 020 9107	IC LC4069UB
IC701	409 002 4700	IC BA3416BL
IC702	409 016 8701	IC LA3220
IC703	409 053 0409	IC TC9153AP
IC704	409 016 7803	IC LA3160T
IC904	409 001 7603	IC AN7812F
IC905	409 001 7603	IC AN7812F
Q501	405 017 9709	TR 2SC3330-U
Q502	405 033 6805	TR 2SD1468S-S
Q551	405 017 9709	TR 2SC3330-U
Q552	405 033 6805	TR 2SD1468S-S
Q601	405 004 5103	TR 2SA608-G-SPA
Q602	405 017 9709	TR 2SC3330-U
Q603	405 004 5103	TR 2SA608-G-SPA
Q604	405 004 5103	TR 2SA608-G-SPA
Q605	405 018 0200	TR 2SC3331-U
Q606	405 017 9709	TR 2SC3330-U
Q607	405 018 0200	TR 2SC3331-U
Q609	405 017 9709	TR 2SC3330-U
Q610	405 017 9709	TR 2SC3330-U
Q611	405 017 9709	TR 2SC3330-U
Q612	405 017 9709	TR 2SC3330-U
Q613	405 013 1301	TR 2SC2120-Y
Q614	405 017 9709	TR 2SC3330-U
Q615	405 017 9709	TR 2SC3330-U
Q616	405 017 9709	TR 2SC3330-U
Q617	405 017 9709	TR 2SC3330-U
Q701	405 017 9709	TR 2SC3330-U
Q702	405 017 9709	TR 2SC3330-U
Q703	405 017 9709	TR 2SC3330-U
Q704	405 017 9709	TR 2SC3330-U
Q705	405 033 6805	TR 2SD1468S-S
Q706	405 017 9709	TR 2SC3330-U
Q752	405 017 9709	TR 2SC3330-U
Q801	405 017 9709	TR 2SC3330-U
Q802	405 017 9709	TR 2SC3330-U
Q803	405 017 9709	TR 2SC3330-U
Q804	405 017 9709	TR 2SC3330-U
Q805	405 033 6805	TR 2SD1468S-S
Q806	405 017 9709	TR 2SC3330-U
Q852	405 017 9709	TR 2SC3330-U
D601	407 007 9904	DIODE GMA01
D602	407 007 9904	DIODE GMA01
D603	407 007 9904	DIODE GMA01
D604	407 007 9904	DIODE GMA01
D605	407 007 9904	DIODE GMA01
D606	407 007 9904	DIODE GMA01
D608	407 007 9904	DIODE GMA01
D609	407 007 9904	DIODE GMA01
D610	407 053 6308	ZENER DIODE MTZ5.1B
D611	407 007 9904	DIODE GMA01
D612	407 007 9904	DIODE GMA01
D613	407 007 9904	DIODE GMA01
D614	407 007 9904	DIODE GMA01
D701	407 007 9904	DIODE GMA01
D702	407 007 9904	DIODE GMA01
D801	407 007 9904	DIODE GMA01
D802	407 007 9904	DIODE GMA01
D950	407 004 9105	DIODE DSF10C
or	407 012 3300	DIODE 1SR35-200A
D951	407 004 9105	DIODE DSF10C
or	407 012 3300	DIODE 1SR35-200A
D952	407 004 9105	DIODE DSF10C
or	407 012 3300	DIODE 1SR35-200A
D953	407 004 9105	DIODE DSF10C
or	407 012 3300	DIODE 1SR35-200A
C625	403 058 2406	POLYESTER 0.015U J 50V
C999	403 057 3800	POLYESTER 0.1U M 50V
R999	⚠ 402 023 2601	FUSIBLE 0.47 JS 1/2W

GRAPHIC EQUALIZER P.C.BOARD ASSY

Ref. No.	Part No.	Description
102	614 201 0815	P.C BOARD ASSY, GEQ
	614 020 6586	SOCKET, 6P
	614 003 5766	V.R, 100KG, BALANCE
	614 003 4363	V.R, GRAPHIC EQUALIZER
Q751	405 012 1807	TR 2SC1815-BL
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K
Q851	405 012 1807	TR 2SC1815-BL
or	405 017 9709	TR 2SC3330-U
or	405 020 7204	TR 2SC945A-K

DOLBY P.C.BOARD ASSY

Ref. No.	Part No.	Description
103	614 201 0839	P.C BOARD ASSY, DOLBY
	614 020 6555	SOCKET, 3P
S2	614 024 2959	SWITCH, DOLBY

POWER SWITCH P.C.BOARD ASSY

Ref. No.	Part No.	Description
104	614 201 0853	P.C BOARD ASSY, POWER SW
	⚠ 614 123 0023	BRACKET FUSE
	⚠ 614 017 6964	TERMINAL BOARD
	⚠ 614 123 2089	TERMINAL
S5	⚠ 614 018 8967	SWITCH
C990	⚠ 404 000 1607	CERAMIC 0.01U F 400V
or	⚠ 404 033 3302	CERAMIC 0.01U M -
or	⚠ 404 033 3401	CERAMIC 0.01U Z -

DUBBING SPEED P.C.BOARD ASSY

Ref. No.	Part No.	Description
105	614 201 0877	P.C BOARD ASSY, DUBBING SPEED
	614 020 6555	SOCKET, 3P
	614 020 6548	SOCKET, 2P
S3	614 024 2959	SWITCH, DUBBING SPEED/BEAT

PARTS LIST

VOLUME SWITCH P.C.BOARD ASSY

Ref. No.	Part No.	Description
106	614 201 0891	P.C BOARD ASSY, VOLUME SW
	614 020 6555	SOCKET, 3P
S940	614 018 9056	SWITCH, UP
or	614 201 1324	SWITCH
S941	614 018 9056	SWITCH, DOWN
or	614 201 1324	SWITCH

TAPE SELECT P.C.BOARD ASSY

Ref. No.	Part No.	Description
107	614 201 0914	P.C BOARD ASSY, TAPE SELECT
	614 020 6586	SOCKET, 6P
	614 200 3756	SWITCH, TAPE SELECT (S9,S10)

POWER AMP P.C.BOARD ASSY

Ref. No.	Part No.	Description
108	614 201 0785	P.C BOARD ASSY, POWER AMP
	614 020 6555	SOCKET, 3P, MAIN IN-SP OUT
	614 020 6579	SOCKET, 5P, TO HEADPHONE
	614 123 0016	BRACKET FUSE
IC902	⚠ 409 101 8302	IC STK4112MK2
Q930	405 012 1807	TR 2SC1815-BL
or	405 017 9709	TR 2SC3330-U
or	405 018 0200	TR 2SC3331-U
or	405 020 7204	TR 2SC945A-K
Q931	405 012 1807	TR 2SC1815-BL
or	405 017 9709	TR 2SC3330-U
or	405 018 0200	TR 2SC3331-U
or	405 020 7204	TR 2SC945A-K
Q932	405 012 1807	TR 2SC1815-BL
or	405 017 9709	TR 2SC3330-U
or	405 018 0200	TR 2SC3331-U
or	405 020 7204	TR 2SC945A-K
Q933	405 012 1807	TR 2SC1815-BL
or	405 017 9709	TR 2SC3330-U
or	405 018 0200	TR 2SC3331-U
or	405 020 7204	TR 2SC945A-K
D920	⚠ 407 004 9105	DIODE DSF10C
or	⚠ 407 012 3300	DIODE 1SR35-200A
D921	⚠ 407 004 9105	DIODE DSF10C
or	⚠ 407 012 3300	DIODE 1SR35-200A
D922	⚠ 407 004 9105	DIODE DSF10C
or	⚠ 407 012 3300	DIODE 1SR35-200A
D923	⚠ 407 004 9105	DIODE DSF10C
or	⚠ 407 012 3300	DIODE 1SR35-200A
D930	407 049 7005	ZENER DIODE GZA15Y
D931	407 005 4505	DIODE DS442X
or	407 013 7109	DIODE 1S2473
C747	403 057 3800	POLYESTER 0.1U M 50V
C748	403 057 3800	POLYESTER 0.1U M 50V
C847	403 057 3800	POLYESTER 0.1U M 50V
C848	403 057 3800	POLYESTER 0.1U M 50V
or	403 057 3800	POLYESTER 0.1U M 50V
R746	401 008 7204	CARBON 2.2K JB 1/2W
R747	401 010 5601	CARBON 5.6 JB 1/2W
R846	401 008 7204	CARBON 2.2K JB 1/2W
R847	401 010 5601	CARBON 5.6 JB 1/2W
R940	402 023 1703	FUSIBLE RES 100 J- 1/4W
R941	402 023 1703	FUSIBLE RES 100 J- 1/4W

HEADPHONE P.C.BOARD ASSY

Ref. No.	Part No.	Description
109	614 201 0778	P.C BOARD ASSY, HEADPHONE
	614 035 4355	SOCKET, HEADPHONE
or	614 197 4620	SOCKET, HEADPHONE
	614 020 6579	SOCKET, 5P

TUNER P.C.BOARD ASSY

Ref. No.	Part No.	Description
110	614 198 9495	P.C BOARD ASSY, TUNER
	614 116 5349	SHIELD PLATE, PARTS SIDE
	614 117 1029	SHIELD PLATE, PATTERN SIDE
	614 117 1036	SHIELD PLATE, COVER
	614 020 6593	SOCKET, 7P
	614 020 6579	SOCKET, 5P
	614 020 6562	SOCKET, 4P
	614 020 6548	SOCKET, 2P
	614 020 6555	SOCKET, 3P
	614 020 8849	SOCKET, 3P
	614 196 6632	LCD
CT101	614 007 3683	TRIMMER, 8P
CT151	614 007 6356	TRIMMER, 11P
CT152	614 007 6356	TRIMMER, 11P
CT153	614 007 6332	TRIMMER, 30P
CT154	614 007 6332	TRIMMER, 30P
T101	614 028 6922	FILTER, BPF
T201	614 030 3476	I.F.T, FM
T202	614 030 4114	I.F.T, FM
T203	614 030 4480	I.F.T, AM
T204	614 029 3906	MX COIL
T301	614 027 7845	CHOKE COIL
T302	614 027 7845	CHOKE COIL
L101	614 034 9870	VHF COIL
L102	614 034 9887	VHF COIL
L103	614 028 4058	FILTER 2.2UH
L104	614 035 0036	VHF COIL
L105	614 034 8286	VHF COIL
L151	614 033 8904	OSC COIL, MW
L152	614 032 8066	ANT COIL, MW
L153	614 034 1003	OSC COIL, LW
L154	614 032 8080	ANT COIL, LW
L155	614 028 4379	FILTER 1000UH
X201	614 030 5128	I.F FILTER
X202	614 030 5128	I.F FILTER
X203	614 030 5128	I.F FILTER
X204	614 030 7443	I.F FILTER
X205	614 030 7399	I.F FILTER, 459KHZ
X401	614 008 1121	CRYSTAL 7.2MHZ
SVR201	614 006 9693	SEMI VR, 20K, AM SD
SVR202	614 006 9679	SEMI VR, 5K, FM SD
SVR301	614 006 9655	SEMI VR, 1K, FM SEPARATION
SVR302	614 006 9686	SEMI VR, 10K, FM VCO
TP201	614 017 7961	TERMINAL BOARD
TP202	614 017 7961	TERMINAL BOARD
TP301	614 017 7961	TERMINAL BOARD
IC201	409 016 2204	IC LA1265S
IC301	409 016 9500	IC LA3361
IC401	410 046 8906	IC TC9306F-032 BS
IC402	409 154 0209	IC TC9172AP
Q101	405 035 8609	TR 2SK544-F
Q102	405 016 5900	TR 2SC2999-E-SPA
Q103	405 075 6009	TR 2SC930-E-CONV
Q104	405 016 5900	TR 2SC2999-E-SPA
Q105	405 026 8700	TR 2SK212-F-SPA
Q151	405 021 0600	TR 2SD1012-G-SPA
Q152	405 021 0600	TR 2SD1012-G-SPA
Q153	405 021 0600	TR 2SD1012-G-SPA
Q154	405 021 0600	TR 2SD1012-G-SPA
Q155	405 021 0600	TR 2SD1012-G-SPA
Q156	405 026 9004	TR 2SK222-D
Q157	405 017 9709	TR 2SC3330-U
Q158	405 017 9709	TR 2SC3330-U
Q201	405 037 4104	TR 2SC930-E-IF-SPA
Q202	405 017 9709	TR 2SC3330-U
Q301	405 017 9709	TR 2SC3330-U
Q302	405 017 9709	TR 2SC3330-U

PARTS LIST

Ref. No.	Part No.	Description
Q303	405 021 0600	TR 2SD1012-G-SPA
Q304	405 021 0600	TR 2SD1012-G-SPA
Q351	405 004 4601	TR 2SA608-F-SPA
Q352	405 017 9709	TR 2SC3330-U
Q354	405 017 9709	TR 2SC3330-U
Q355	405 004 4601	TR 2SA608-F-SPA
Q356	405 004 4601	TR 2SA608-F-SPA
Q357	405 017 9709	TR 2SC3330-U
Q358	405 004 4601	TR 2SA608-F-SPA
Q359	405 017 9709	TR 2SC3330-U
Q360	405 004 4601	TR 2SA608-F-SPA
Q401	405 017 9709	TR 2SC3330-U
Q402	405 026 9004	TR 2SK222-D
Q403	405 010 9607	TR 2SC1571-F-NP
Q901	405 004 4601	TR 2SA608-F-SPA
D101	408 000 0103	VA SVC211SP-B2-AUD
D102	408 000 0103	VA SVC211SP-B2-AUD
D103	408 000 0103	VA SVC211SP-B2-AUD
D104	407 005 4505	DIODE DS442X
D151	407 000 1905	VARACTOR DI KV1260(B)
D201	407 007 9904	DIODE GMA01
D301	407 005 4505	DIODE DS442X
D302	407 005 4505	DIODE DS442X
D351	407 007 9904	DIODE GMA01
D401	407 005 4505	DIODE DS442X
D402	407 007 9904	DIODE GMA01
D403	407 005 4505	DIODE DS442X
D405	407 005 4505	DIODE DS442X
D406	407 005 4505	DIODE DS442X
D408	407 005 4505	DIODE DS442X
D409	407 005 4505	DIODE DS442X
D410	407 005 4505	DIODE DS442X
D411	407 005 4505	DIODE DS442X
D901	407 053 8807	ZENER DIODE MTZ9.1B
C152	403 147 1907	STYRENE 560P J 50V
C158	403 129 8504	STYRENE 510P J 50V
C159	403 033 3206	CERAMIC 82P J 50V
C306	403 087 2606	STYRENE 1000P J 50V
C407	403 106 1603	NP-ELECT 1U Q 50V
C410	404 034 8405	CAPACITOR 0.047F Z 5.5V
or	404 037 4107	CAPACITOR 0.047F - 5.5V

PRESET P.C.BOARD ASSY

Ref. No.	Part No.	Description
111	614 198 9501	P.C BOARD ASSY, PRESET
S401	614 018 9056	SWITCH, M1
or	614 201 1324	SWITCH
S402	614 018 9056	SWITCH, M2
or	614 201 1324	SWITCH
S403	614 018 9056	SWITCH, M3
or	614 201 1324	SWITCH
S404	614 018 9056	SWITCH, M4
or	614 201 1324	SWITCH
S405	614 018 9056	SWITCH, M5
or	614 201 1324	SWITCH
S406	614 018 9056	SWITCH, M6
or	614 201 1324	SWITCH
S407	614 018 9056	SWITCH, DOWN
or	614 201 1324	SWITCH
S408	614 018 9056	SWITCH, UP
or	614 201 1324	SWITCH
CN402	614 020 6593	SOCKET, 7P

LCD LAMP P.C.BOARD ASSY

Ref. No.	Part No.	Description
113	614 198 9518	P.C BOARD ASSY, BAND/MODE
CN406	614 020 6548	SOCKET, 2P

Ref. No.	Part No.	Description
PL401	614 046 0094	LAMP, 12V 0.1A

BAND/MODE P.C.BOARD ASSY

Ref. No.	Part No.	Description
114	614 198 9525	P.C BOARD ASSY, REMOCON IR
S409	614 018 9056	SWITCH, BAND
or	614 201 1324	SWITCH
S410	614 018 9056	SWITCH, MODE
or	614 201 1324	SWITCH
CN404	614 020 6579	SOCKET, 5P

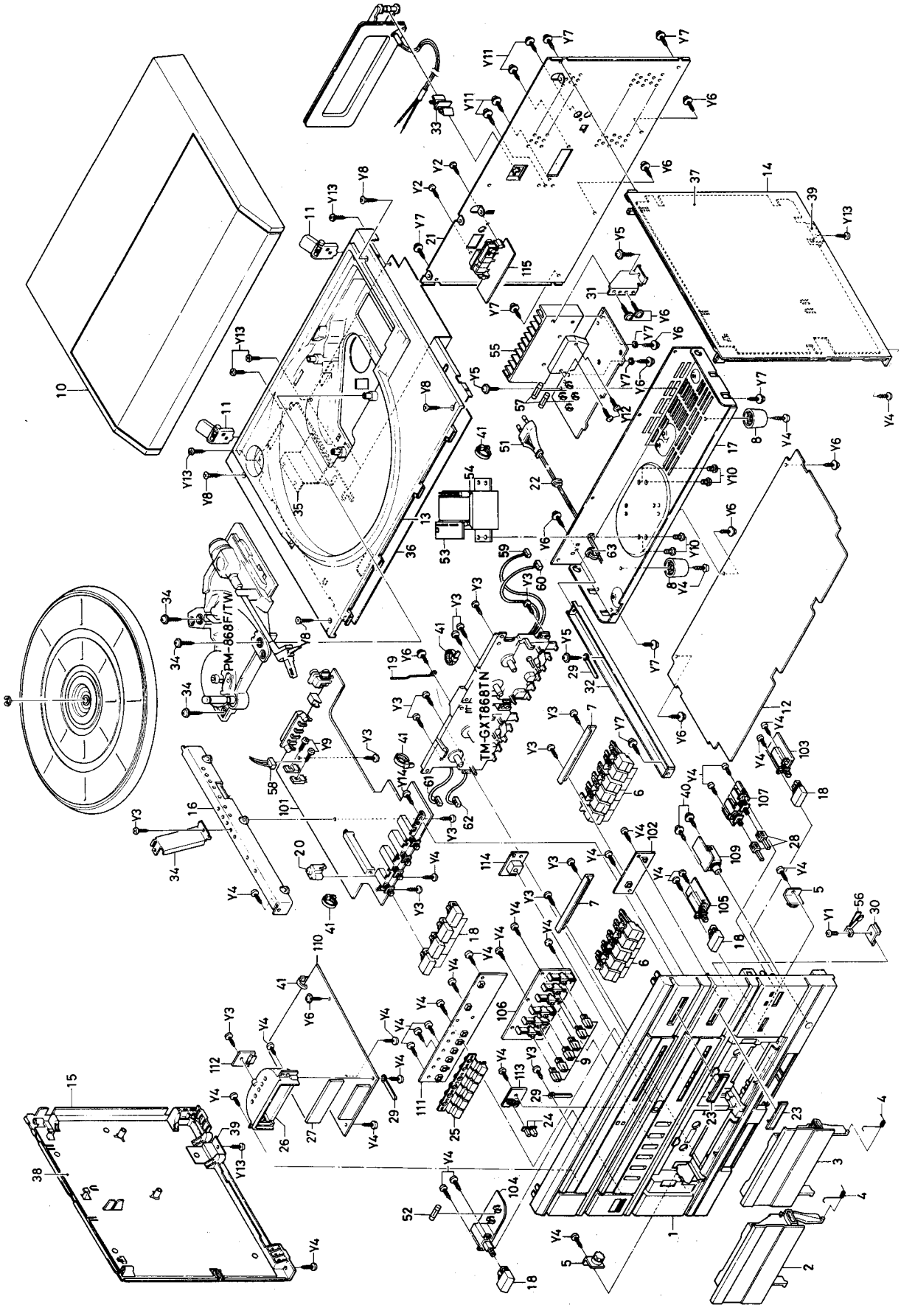
REMOCON SENSOR P.C.BOARD ASSY

Ref. No.	Part No.	Description
112	614 198 9532	P.C BOARD ASSY, LCD LAMP
S411	614 197 4569	SPECIAL SWITCH, INFRARED RAY RECEIVER
or	614 201 8668	SPECIAL SWITCH
CN408	614 020 6555	SOCKET, 3P

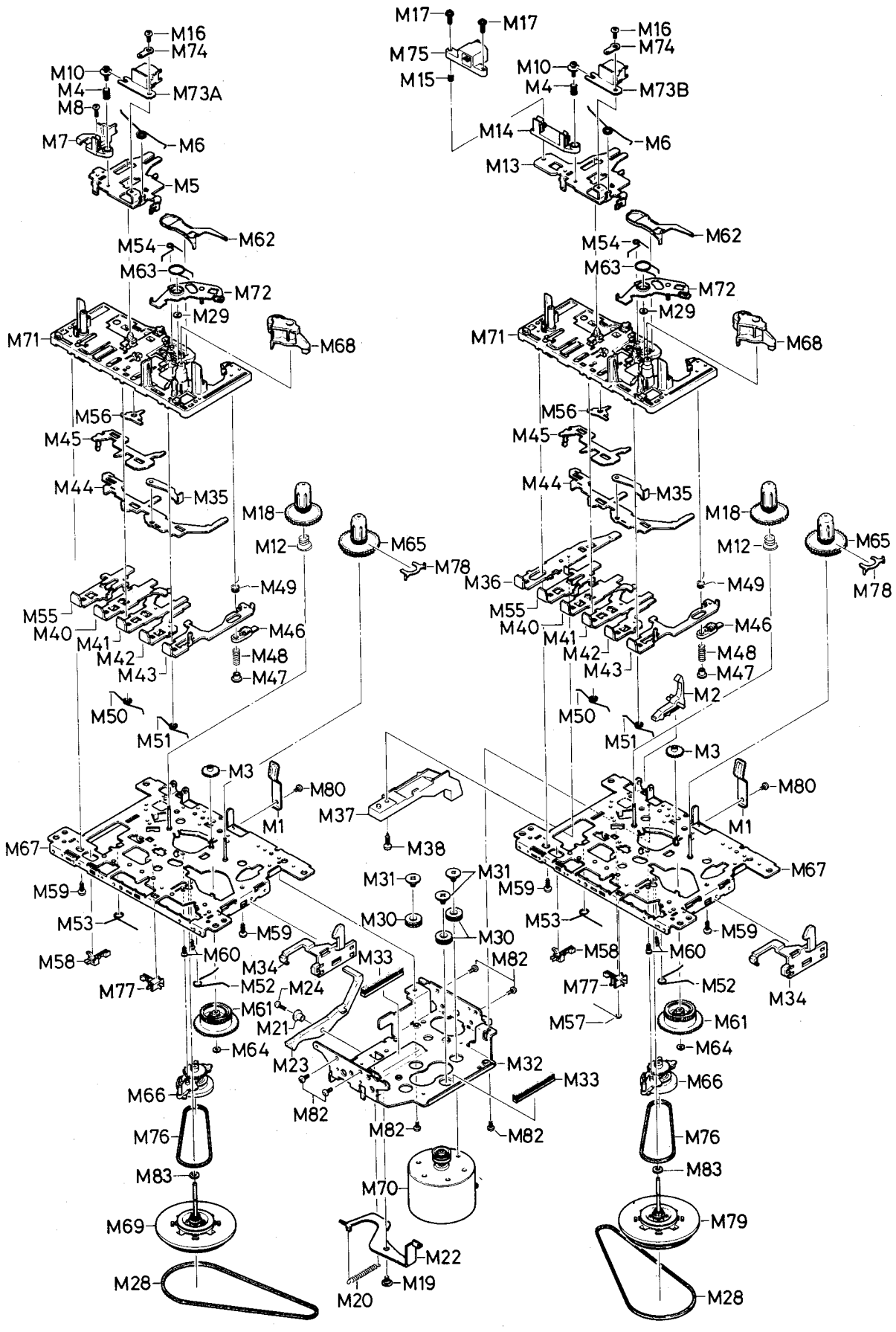
ANTENNA SOCKET P.C.BOARD ASSY

Ref. No.	Part No.	Description
115	614 198 9549	P.C BOARD ASSY, ANT. SOCKET
	614 195 8422	TERMINAL
	614 020 6548	SOCKET, 2P

EXPLODED VIEW (CABINET & CHASSIS)



EXPLODED VIEW (MECHANISM)



PARTS LIST (MECHANISM)

MECHANISM

Ref. No.	Part No.	Description
M1	614 151 8299	SPRING PLATE
M2	614 140 1508	LEVER, PREVENT MISRECORDING
M3	614 134 9046	GEAR, F.FWD
M4	614 151 7162	SPRING COIL, HEAD AZIMUTH
M5	614 139 1113	SLIDE, HEAD PANEL
M6	614 152 1237	SPRING WIRE, HEAD PANEL
M7	614 146 5111	BRACKET, TAPE GUIDE
M8	412 026 1501	SPECIAL SCREW 2X6MM
M10	412 026 1709	SPECIAL SCREW 2X7MM, AZIMUTH
M12	614 151 7179	SPRING COIL, BACK TENSION
M13	614 196 0494	SLIDE, HEAD PANEL
M14	614 196 0470	BRACKET HEAD, ERASE HEAD
M15	614 151 5090	SPRING COIL, ERASE HEAD
M16	412 004 3701	SPECIAL SCREW 2X3MM
M17	412 027 4600	SPECIAL SCREW 2X8MM
M18	614 204 5695	REEL ASSY, SUPPLY
M19	412 005 8101	SPECIAL SCREW, PLAY KICK LEVER
M20	614 151 4758	SPRING COIL, PLAY KICK LEVER
M21	614 129 0683	BOSS, PLAY KICK LEVER
M22	614 139 8679	LEVER, PLAY KICK
M23	614 140 1676	LEVER, PLAY KICK
M24	411 025 2205	SCR S-TPG PAN 2X6, KICK LEVER
M28	614 133 4127	SQUARE BELT, MAIN
M29	412 026 1808	SPECIAL WASHER, 1.45X3.8X0.5MM
M30	614 126 6831	CUSHION, MOTOR MTG.
M31	412 026 1907	SPECIAL SCREW, MOTOR MTG.
M32	614 122 9553	BRACKET MOTOR
M33	614 126 6848	CUSHION, ANTI-VIBRATION
M34	614 140 1522	LEVER, EJECT SLIDE
M35	614 140 1539	LEVER, EJECT KICK
M36	614 196 0500	LEVER, RECORD BUTTON
M37	614 108 2929	BRACKET, REC SWITCH
M38	411 025 2007	SCR S-TPG PAN 2X4
M40	614 196 0517	LEVER, REW BUTTON
M41	614 196 0524	LEVER, F.FWD BUTTON
M42	614 196 0531	LEVER, STOP BUTTON
M43	614 196 0548	LEVER, PAUSE BUTTON
M44	614 139 1120	SLIDE, PUSH BUTTON ACTUATOR
M45	614 201 1744	SLIDE, SWITCH ACTUATOR
M46	614 140 1591	LEVER, PAUSE
M47	614 129 0669	BOSS, PAUSE STOPPER
M48	614 151 7186	SPRING COIL, PAUSE LEVER
M49	614 152 1244	SPRING WIRE, PAUSE CONTROL
M50	614 152 1251	SPRING WIRE, BUTTON LEVER
M51	614 152 1268	SPRING WIRE, BUTTON LEVER
M52	614 152 1275	SPRING WIRE, EJECT ACTUATOR
M53	614 152 1282	SPRING WIRE, PS LEVER
M54	614 152 1299	SPRING WIRE, CONTROL
M55	614 196 0555	LEVER, PLAY BUTTON
M56	614 129 0676	BOSS, R/P STOPPER
M57	614 152 1305	SPRING WIRE, RECORD BUTTON
M58	614 024 3437	SWITCH, POWER
M59	412 026 2201	SPECIAL SCREW 2X5MM
M60	412 026 2300	SPECIAL SCREW 2X4.5MM
M61	614 134 9053	GEAR, CAM
M62	614 140 1614	LEVER, SENSING
M63	614 151 8312	SPRING PLATE, GEAR PLATE
M64	412 013 5000	SPECIAL WASHER 1.2X3.8X0.3T
M65	614 204 5701	REEL ASSY, TAKE-UP
M66	614 069 2273	PULLEY ASSY, REW/F.FWD
M67	614 067 2770	CHASSIS ASSY, MECHANISM
M68	614 068 6845	LEVER PINCH ROLLER ASSY
M69	614 068 1871	FLYWHEEL DISK ASSY
M70	614 045 2006	COMMUTATE MOTOR ASSY
M71	614 067 3258	SUB CHASSIS ASSY, BASE METAL
M72	614 070 0916	LEVER ASSY

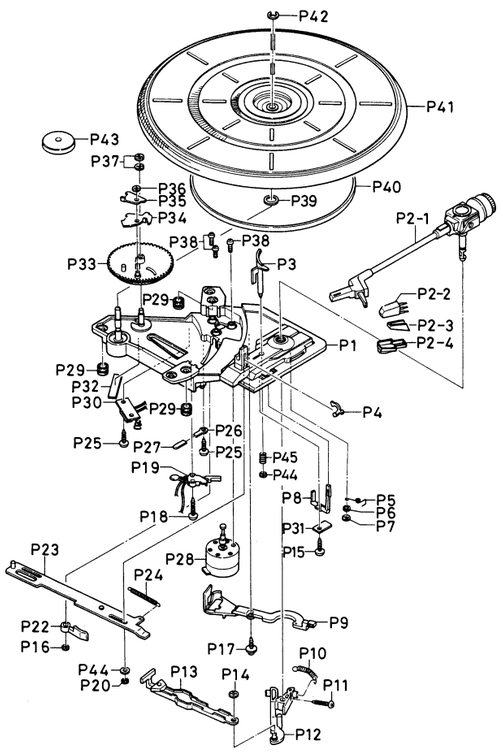
Ref. No.	Part No.	Description
M73A	614 021 7995	MAGNETIC HEAD, PLAY HEAD
M73B	614 021 7988	MAGNETIC HEAD, R/P HEAD
M74	614 129 9068	LUG, HEAD GROUND
M75	614 021 8251	MAGNETIC HEAD, ERASE HEAD
M76	614 195 5087	SQUARE BELT, FWD/REW
M77	614 195 4424	SWITCH, PLAY
M78	614 195 5094	LEVER, SENSOR
M79	614 196 0197	FLYWHEEL DISK ASSY
M80	412 026 1402	SPECIAL SCREW 2X3MM
M82	412 026 2003	SPECIAL SCREW 2X4MM
M83	412 026 2102	SPECIAL SCREW 2X3MM
M83	412 026 2508	SPECIAL WASHER 2X3.5X0.3T

TM-GXT868TN (149-474-08)

EXPLODED VIEW & PARTS LIST (TUNR-TABLE MECHANISM)

TURNTABLE MECHANISM

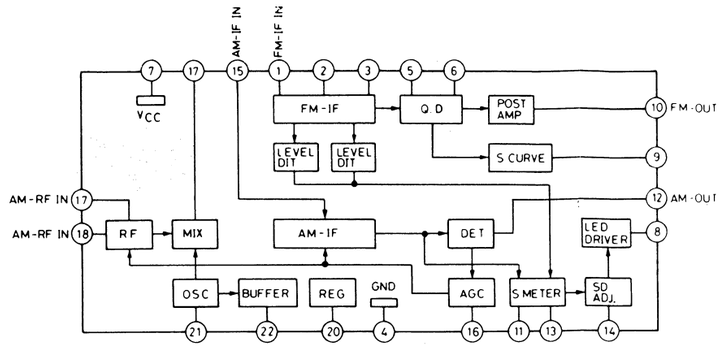
Ref. No.	Part No.	Description
P1	614 067 2565	CHASSIS ASSY [SM41-01]
P2-1	614 201 7845	ARM ASSY [PA1147025E]
P2-2	614 201 7418	CARTRIDGE [CR2500]
P2-3	614 201 7401	NEEDLE CARTRIDGE
P2-4	614 201 8002	COVER [CRN2500-2]
P3	614 152 2081	LIFTER, TONE ARM LIFTER [SM38]
P4	614 152 2425	REST, ARM CLIP [SPB36-1]
P5	614 152 0162	SPRING WIRE, ADD MONENTUM [SM60-7-01]
P6	412 014 1506	SPECIAL WASHER, P5 FIXING [CP27-1]
P7	614 127 6410	SPECIAL WASHER, P5 FIXING [B72-5]
P8	614 202 1804	LEVER, MANUAL LIFT [SPB133-4B]
P9	614 139 9461	LEVER, SIZE CHANGE [SM60-01]
P10	614 151 5472	SPRING COIL, ARM LEVER PULLER [SA24-1]
P11	412 006 1804	SPECIAL SCREW 3X20, RETURN ADJUST
P12	614 139 9447	LEVER, ARM [SE24]
P13	614 138 9950	SLIDE, TRIP [SE108]
P14	614 127 6397	SPECIAL WASHER, TRIP LEVER [CSB73]
P15	412 006 1903	SPECIAL SCREW 3X8, LIFT LEVER
P16	614 151 8206	SPRING PLATE, SW LEVER MTG. [SP133-6]
P17	412 006 2009	SPECIAL SCREW 3X6, SIZE LEVER
P18	412 006 2108	SPECIAL SCREW 2X12, MAIN SW
P19	614 024 0764	SWITCH, MAIN (S9) [RLS0201]
P20	614 127 6403	SPECIAL WASHER, E RING 3MM [E73A]
P22	614 140 1256	LEVER, SWITCH [MK108-1]
P23	614 069 8558	SLIDE ASSY, MAIN
P24	614 151 5489	SPRING COIL, SLIDE (P23) PULLER [SA110-2]
P25	412 006 2207	SPECIAL SCREW 3X8, PCB MTG. & LUG
P26	614 130 0726	LUG, ARM LEAD RETAINER [SM26-1]
P27	614 130 7589	TUBE 3.2X20, ARM LEAD RETAINER
P28	614 196 0128	COMMUTATE MOTOR ASSY [SC100-3]
P29	614 124 9193	RUBBER CUSHION, MECHANISM [SM306-01]
P30	614 205 4710	P.C BOARD ASSY, RELAY
P31	614 201 8408	SPRING PLATE [SPB133-6]
P32	614 201 8606	LABEL, MODEL NAME [SE206-44]
P33	614 134 8094	GEAR, MAIN [SA120]
P34	614 139 9485	LEVER, LOWER TRI [SA121]
P35	614 139 9478	LEVER, ENGAGEMENT [SA123]
P36	614 127 6397	SPECIAL WASHER, LEVER (P35) MTG [CSB73]
P37	614 032 5302	SPECIAL WASHER, MAIN GEAR [CSB74]
P38	412 006 2306	SPECIAL SCREW 2.6X7, MOTOR
P39	412 014 1605	SPECIAL WASHER, T.T THRUST [SA56-1]
P40	614 132 9086	FLAT BELT, TURN TABLE [BE1704506B]
P41	614 202 1729	TURN TABLE ASSY [SPB52A]
P42	411 001 0508	RING E 6 [ERE76]
P43	614 119 9788	SPACER, 45 ADAPTOR [SK22]
P44	614 032 5302	SPECIAL WASHER, SW LEVER (P22) [CSB74]
P45	614 206 1763	SPRING COIL [TB133-8]
	403 069 5007	CERAMIC 0.01U K 50V



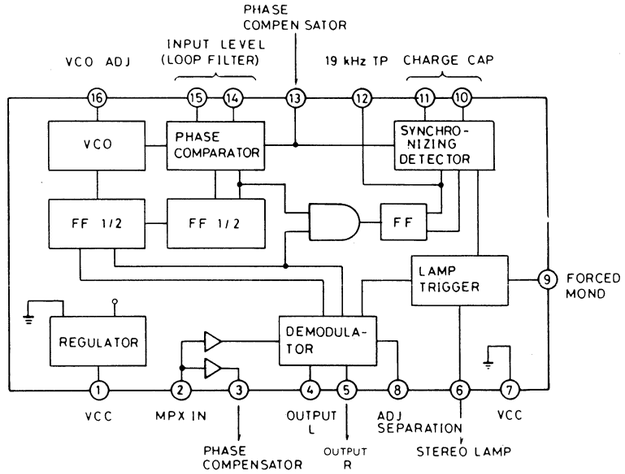
TURNTABLE MECHANISM PM-868F/TW (149-441-04)

IC BLOCK DIAGRAM (1/3)

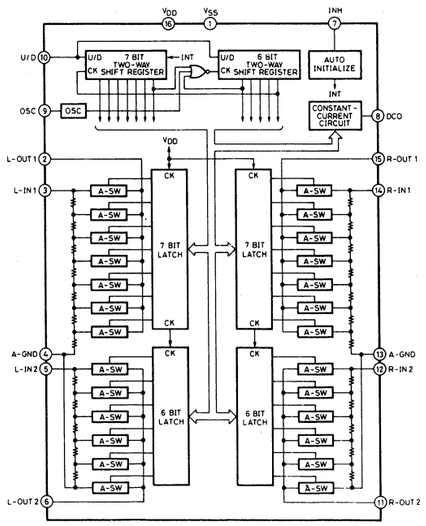
IC201 LA1265 (Tuner System)



IC301 LA3361 (PLL FM MPX. Stereo Demodulator)

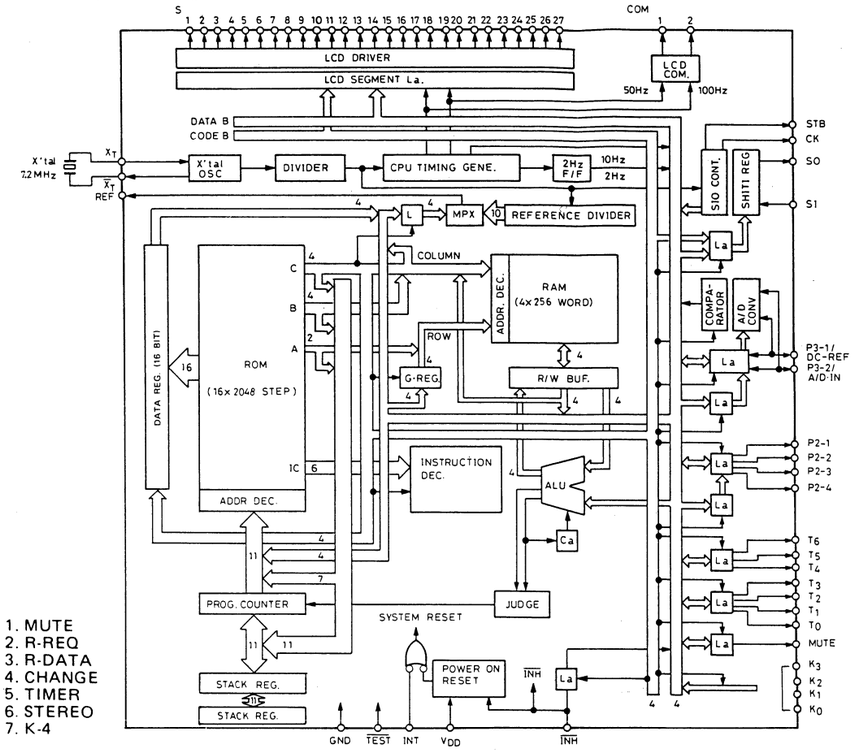


IC703 TC9153 (Electronic Volume)

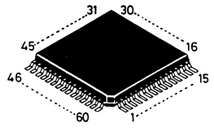


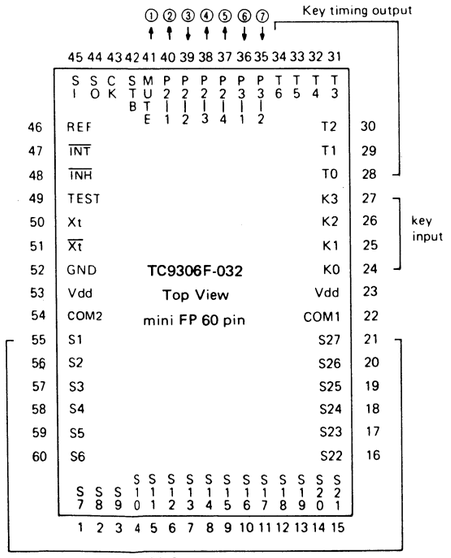
IC BLOCK DIAGRAM (2/3)

IC402 TC9306F-032-BS



1. MUTE
2. R-REQ
3. R-DATA
4. CHANGE
5. TIMER
6. STEREO
7. K-4





SYSTEM SUMMARY (TC9306F-032)

Combined with PLL LIS TC 9172P, high efficiency digital tuning system with FM/MW 2-band can be made.

BAND

BAND	CODE A	CODE B	FREQUENCY (Hz)	STEP (Hz)	Fref (Hz)	IF (Hz)
FM	0	0	87.9 ~ 107.9 M	200K	25K	+10.7M
	1	0	87.50 ~ 108.00 M	50K		
	0	1	76.0 ~ 90.0 M	100K		−10.7M
	1	1	87.4 ~ 108.1 M	50K		+10.7M
MW	0	0	530 ~ 1600 K	10K	10K	+450K
	1	0	531 ~ 1602 K	9K	9K	
	0	1	522 ~ 1611 K			+459K
	1	1	522 ~ 1629 K			+450K
LW	0	0	LW NO BAND	—	—	—
	1	0	153 ~ 281 K	AUTO MANU 9K/1K	1K	+450K
	0	1	144 ~ 290 K			+459K
SW1	1	—	13.2 ~ 7.3 M	5K	5K	+450K
SW2	—	1	29.5 ~ 21.75 M			

TC9306F-032

PORT	No.	NAME	FUNCTION	ACTIVE	FIRST SETTING
MUTE	41	MUTE	MUTE OUTPUT	H	H
P2−1	40	REM-DATA	REMOTE INPUT	H	−
P2−2	39	VR UP	VR UP OUTPUT	H	L
P2−3	38	VR DOWN	VR DOWN OUTPUT	H	L
P2−4	37	AUTO/MANUAL	AUTO OUTPUT	H	L
P3−1	36	TUNED/SD	TUNED & SD INPUT	L	−
P3−2	35	STEREO	STEREO INPUT	L	−

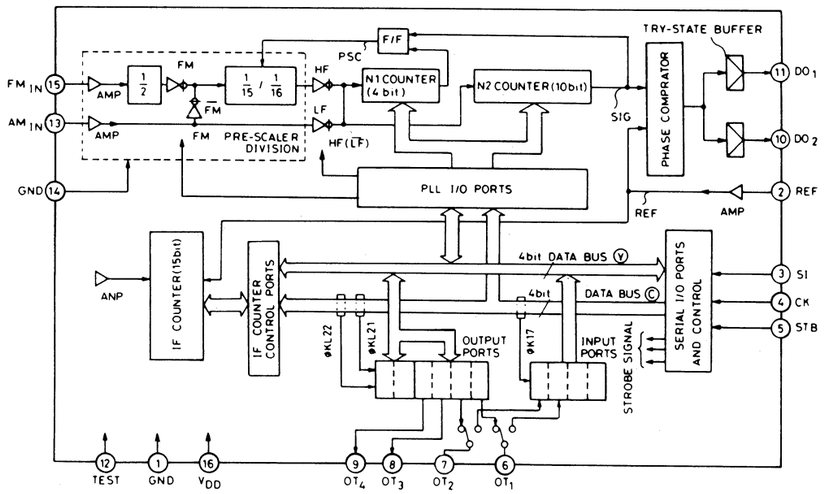
Function of terminals

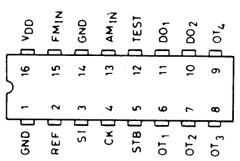
Pin No.	Symbol	Name	Function
22 54	COM1 COM2	LCD common output	These are output terminals for commun signal to LCD. It is possible to display maximum 54 segment at matrix of S1 − S27. Three levels of VDD, 1/2VDD and GND at 5ms intervals is output with 50Hz cycle from these terminals.
55 ~ 60 1 ~ 21	$S_1 \sim S_6$ $S_7 \sim S_{27}$	LCD segment output	These are output terminals of segment signal. It is possible to display maximum 54 segment of matrix of CCM1 and CCM2.
24 ~ 27	$K_0 \sim K_3$	Key input port	These are 4-bit input port for key matrix input. All these terminals have pull down resistor themselves. Usually, $T_0 \sim T_7$ output ports are used for key return timing signal output.
28 ~ 34	$T_0 \sim T_6$	Key timing output port	These are output ports for 4-bit ($T_0 \sim T_3$) and 3-bit ($T_4 \sim T_6$). Usually, these are used for key return timing signal output of key matrix.
35 36	P3−2 /A/D.IN P3−1 /DC. REF	I/O port 3 A−D /analogue voltage input /standard voltage input	These are I/O ports of 2-bit. The port can designate output and input at every 1 bit and the designation can be made depend on contents of inner port called PORT-3 I/O CONTROL. Also, these terminals are used for analogue input of built-in 4-bit A/D converter. Change control to A/D converter input is made depend on contents of PORT-3 I/O CONTROL port. Built-in A/D converter is controlled by program of random comparation system, P3-1 is for standard voltage input and P3-2 is for analogue comparate input.
37 ~ 40	P2−4 P2−1	I/O port-2	These terminals are 4-bit I/O ports. The port can designate the output and input at every 1 bit and designation can be made depend on contents of inner port called PORT-2 I/O CONTROL.
41	MUTE	Muting signal output port	This terminal is for 1 bit output port and usually used for muting control signal output. Note: When $\overline{INH}$ input is changing "H" to "L" or "L" to "H" alternately, output will automatically be set to "H" level.
42 43 44 45	STB CK SO SI	Strobing pulse output Serial clock output Serial data output Serial data input	These terminals are for serial interface. It can control an external PLL LSI or optional IC by SIO command. Serial transmission mode of $\overline{NCD}$/NCD can be selected by the program.
46	REF	Reference Frequency Signal output	This is output terminal for standard frequency signal to PLL LSI. Eight kind of 1kHz, 5kHz, 9kHz, 10kHz, 12.5kHz, 25kHz, 50kHz and 100kHz standard frequency signal can be selected by the program. Note: When $\overline{INH}$ is in "L" level, output is automatically fixed to "L" level.
47	$\overline{INT}$	Initialize input	This is input terminal for system reset signal of device. When $\overline{INT}$ is in "L" level, device will be reset. When INT are "H" level, program starts from "0". This terminal is used in "H" level setting because usually, when 0V → 4.5V voltage is applied to V_{DD}, device will be reset (power on reset). Note: After system reset, I/O port is set to input mode but output port is instable, therefore, initialize the program depend on condition if needed.

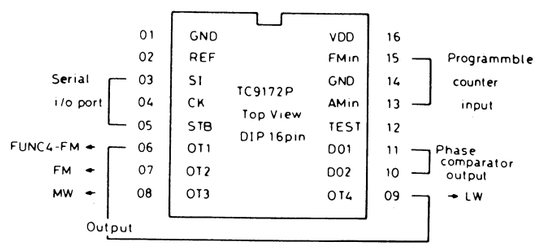
IC BLOCK DIAGRAM (3/3)

Pin No.	Symbol	Name	Function
48	$\overline{INH}$	Inhibit input	This is input port for signal selection of radio mode. It judges "radio on" by "H" level input and "radio off" by "L" level input. When this terminal is in "L" level, reference output is automatically fixed to "L" level.
49	TEST	Test mode control input	This is input terminal for test mode control. It becomes test mode at "H" level and normal mode at "L" level or NC condition. This terminal has pull down resistor itself and usually it is set to NC or "L" level.
50 51	X_T X_T	X'tal OSC terminal	This is connection terminal for X'tal. Connect 7.2MHz X'tal to this terminal.
52	GND	GND terminal	This is ground terminal of device.
23 53	V_{DD}	Power supply terminal	These are terminals for V_{DD}. Usually applies 5V ± 10% to this terminals. Voltage can be reduced to 2V for back up condition. Also, when 0V → 4.5V is applied to these terminals, device will be in system reset and program start from "0". Note: Make power on reset at the "L" level (= $\overline{INH}$) condition.

IC401 TC9172AP (HIGH-SPEED PLL WITH PRE-SCALER)



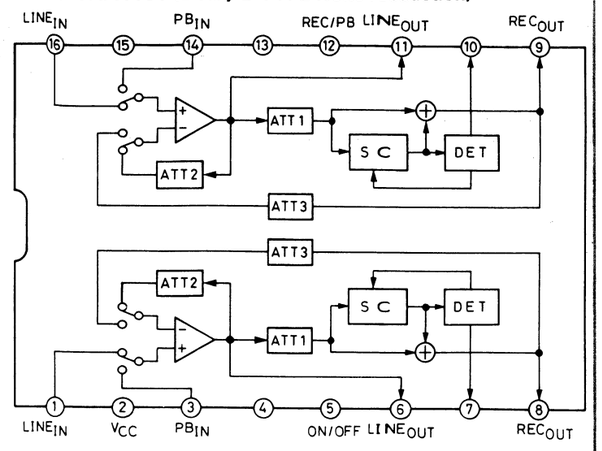




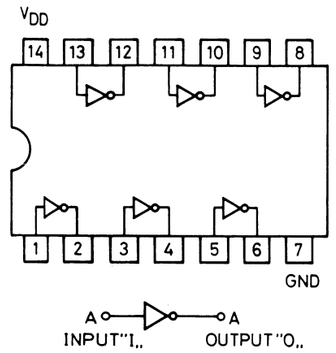
TC9172AP

PORT	NO.	NAME	FUNCTION	ACTIVE	FIRST SETTING
OT 1	06	FM	FM BAND OUTPUT	H	H
OT 2	07	AM (MW, LW)	LW, MW OUTPUT	H	L
OT 3	08	MW	MW BAND OUTPUT	H	L
OT 4	09	LW	LW BAND OUTPUT	H	L

IC501 CXA1101 (Dolby B-TYPE Noise Reduction)



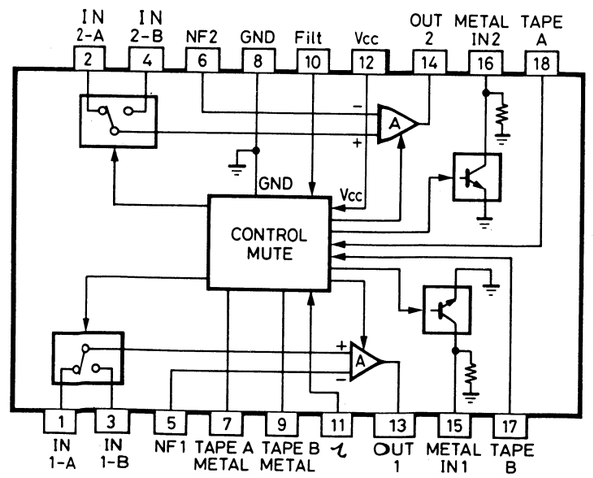
IC601 LC4069 (Hex Inverter)



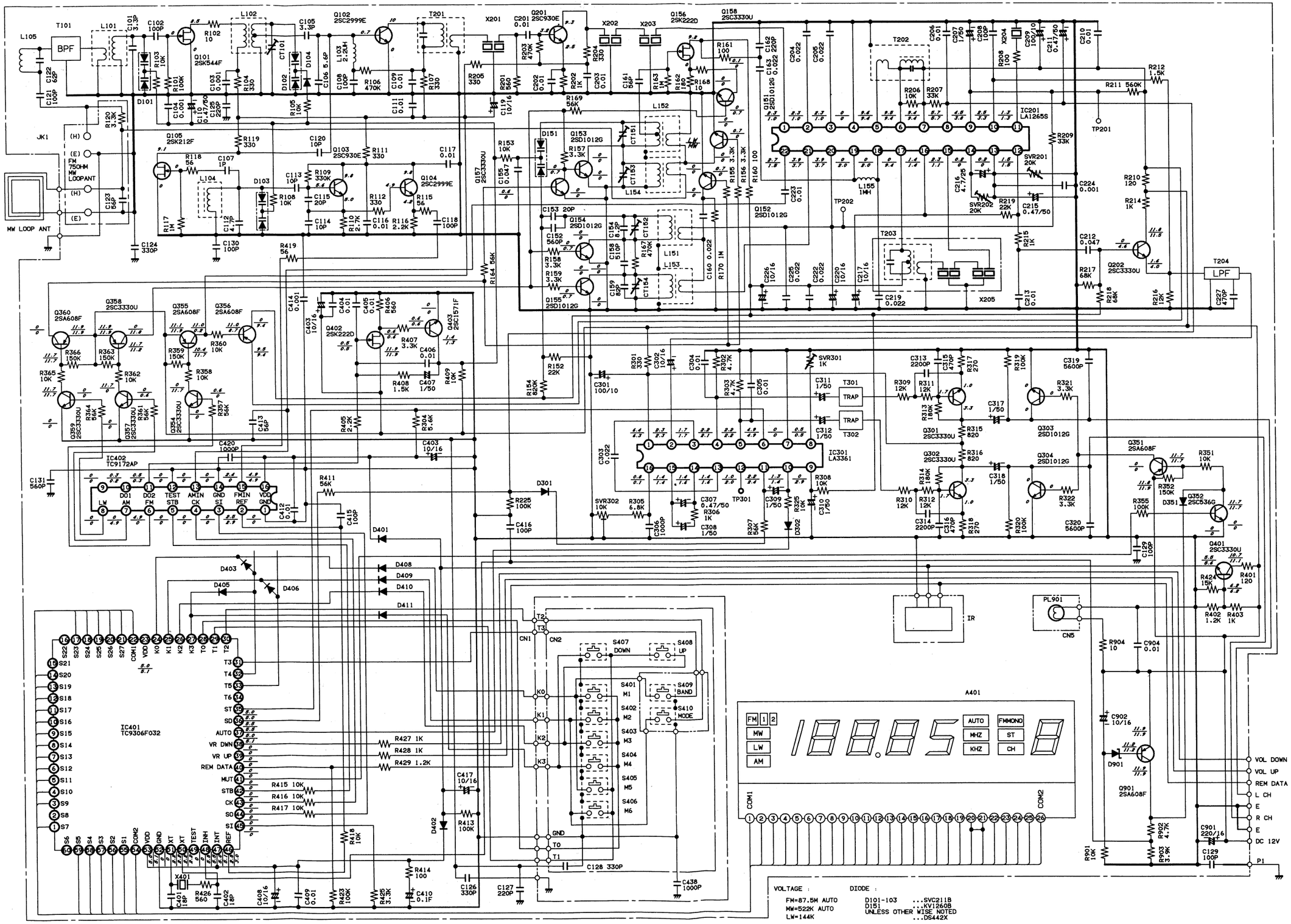
TRUTH VALUE TABLE

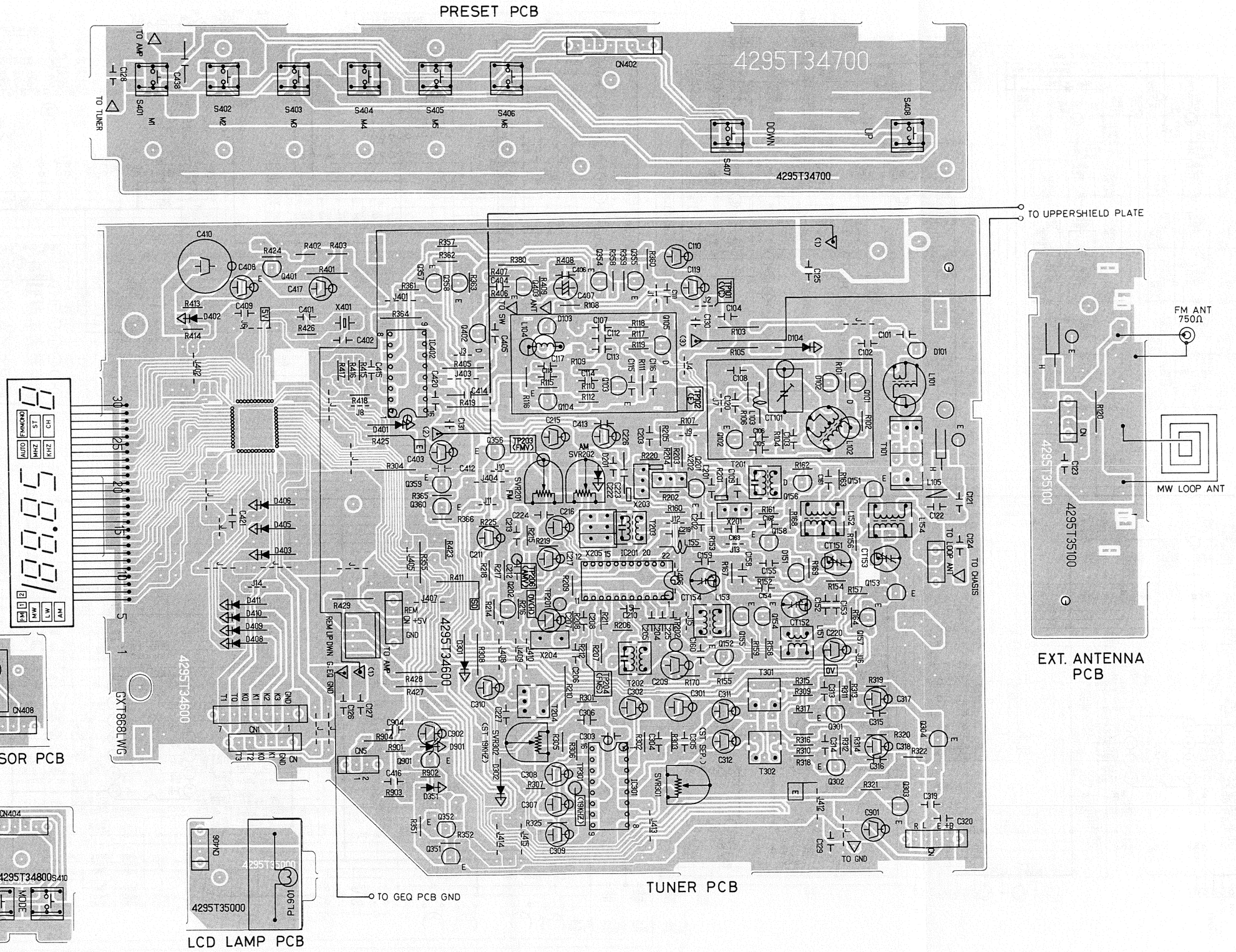
INPUT	OUTPUT
"I,,	"O,,
L	H
H	L

IC701 BA3416BL (Double Mechanism Selector)

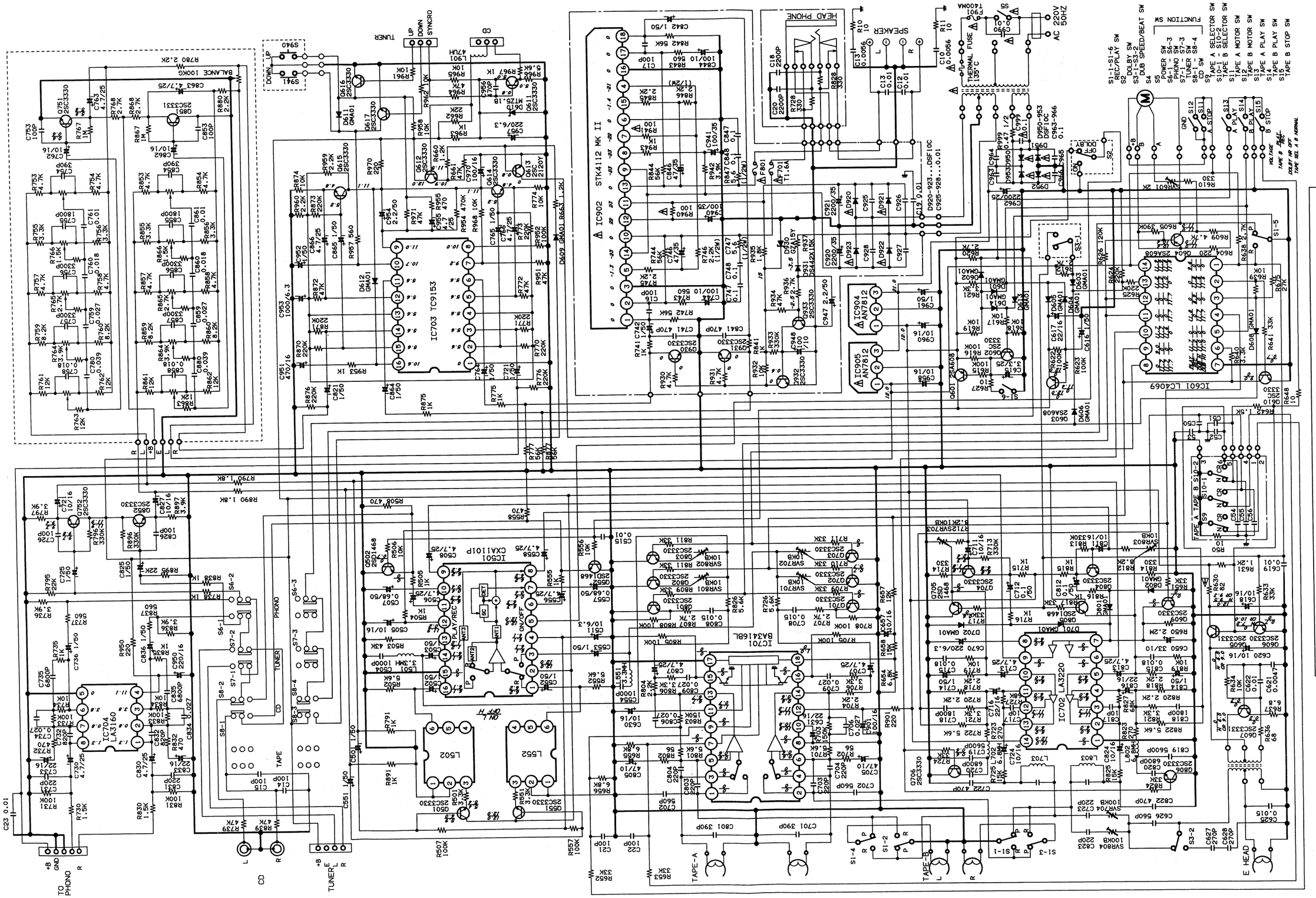


SCHEMATIC DIAGRAM (TUNER)




PRESET PCB
4295T34700
CN402
S401
S402
S403
S404
S405
S406
S407
S408
DOWN
UP
TO TUNER
TO AMP
4295T34700
TO UPPERSHIELD PLATE
FM ANT 750Ω
MW LOOP ANT
4295T35100
EXT. ANTENNA PCB
4295T34600
GXT868LWG
TUNER PCB
REMOCON SENSOR PCB
CN408
4295T34900
BAND-MODE SWITCH PCB
CN404
S409
4295T34800
S410
BAND
MODE
LCD LAMP PCB
4295T35000
PL901
CN401
TO GEQ PCB GND
TO CHASSIS
TO LOOP ANT
TO GND
REM LP DOWN GEQ GND
REM +5V
GND
TO AMP
FM
ST
CH
MONO
AUTO
MHz
kHz
AM
FM
1
2
LW
MW

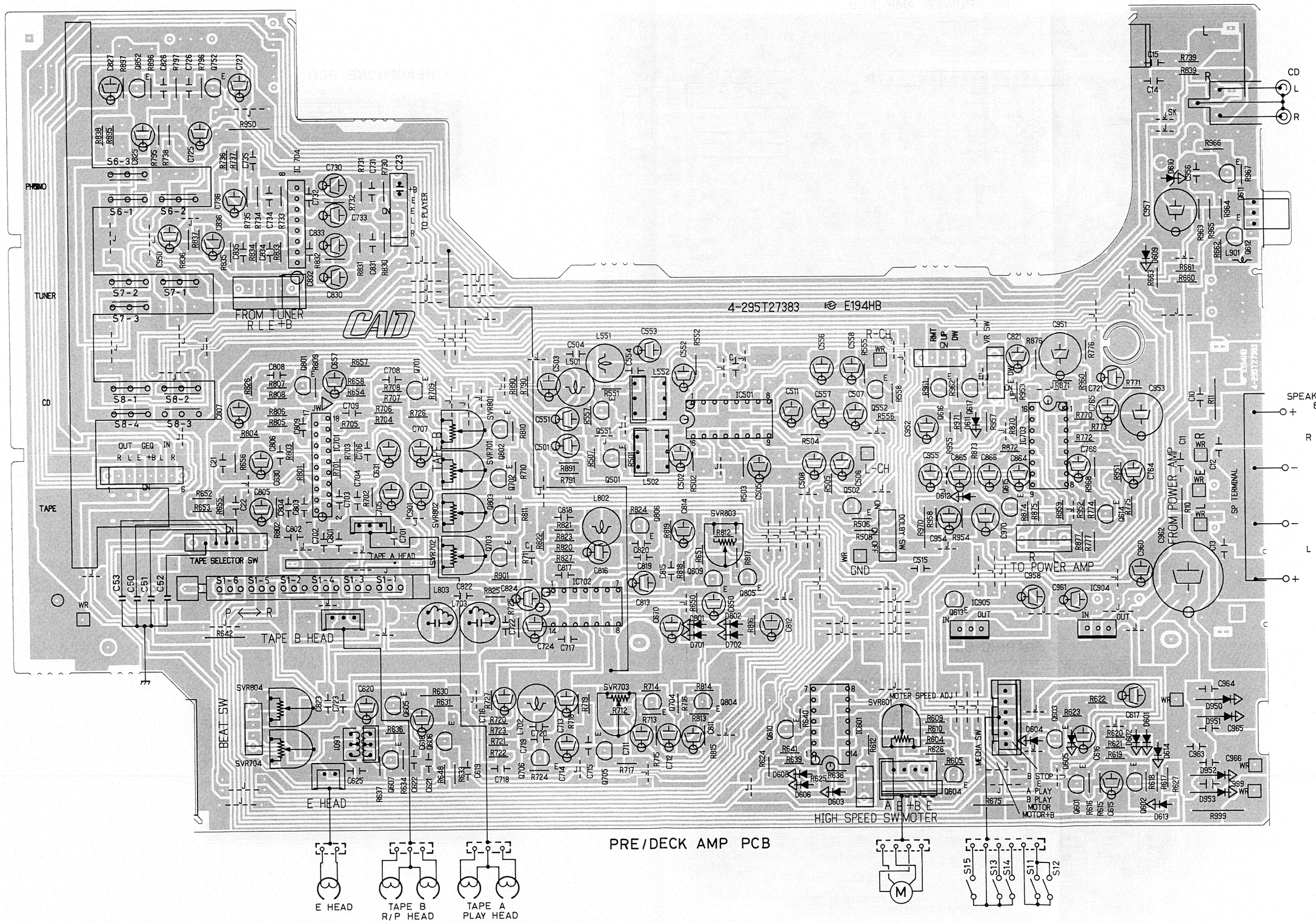
SCHEMATIC DIAGRAM (DECK & AMP)



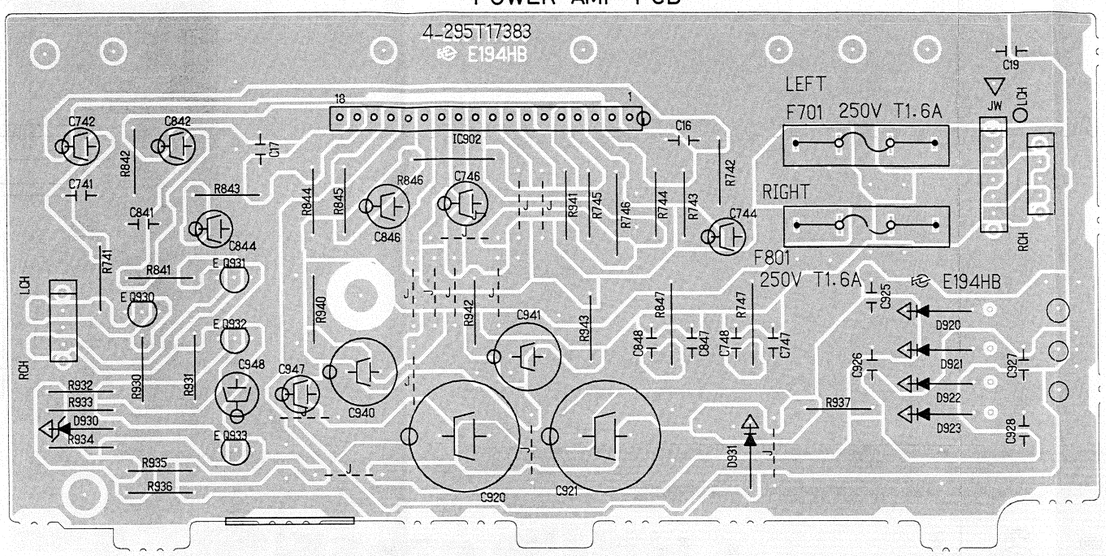
PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠ use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

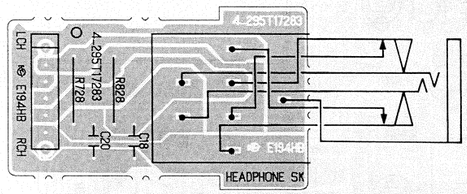
WIRING DIAGRAM (DECK)



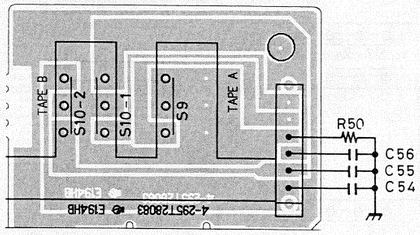
POWER AMP PCB



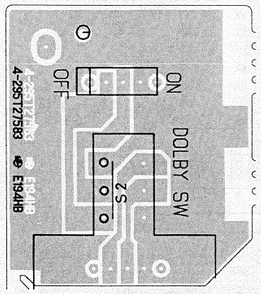
HEADPHONE PCB



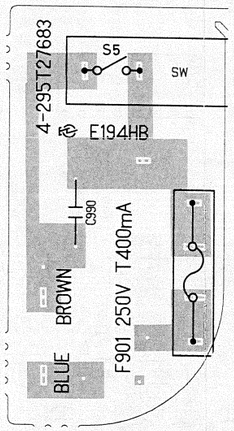
TAPE SELECT PCB



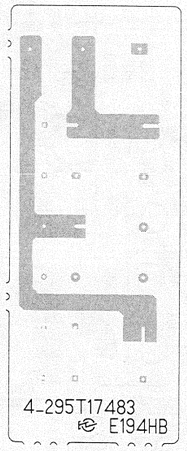
DOLBY PCB



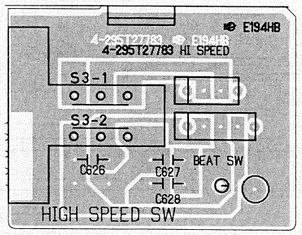
POWER SWITCH PCB



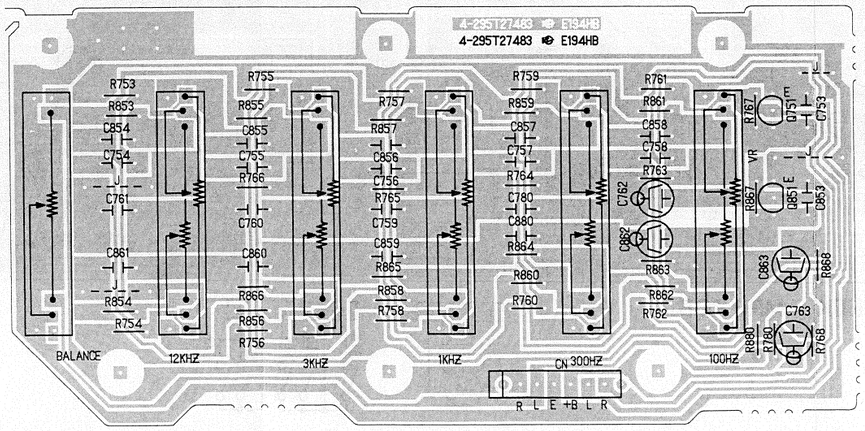
P.T PRIMARY PCB



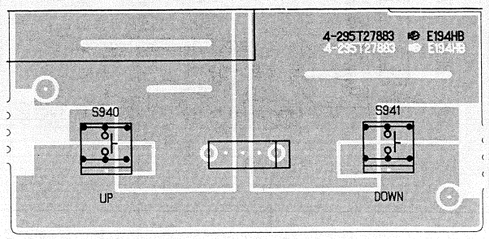
DUBBING SPEED PCB

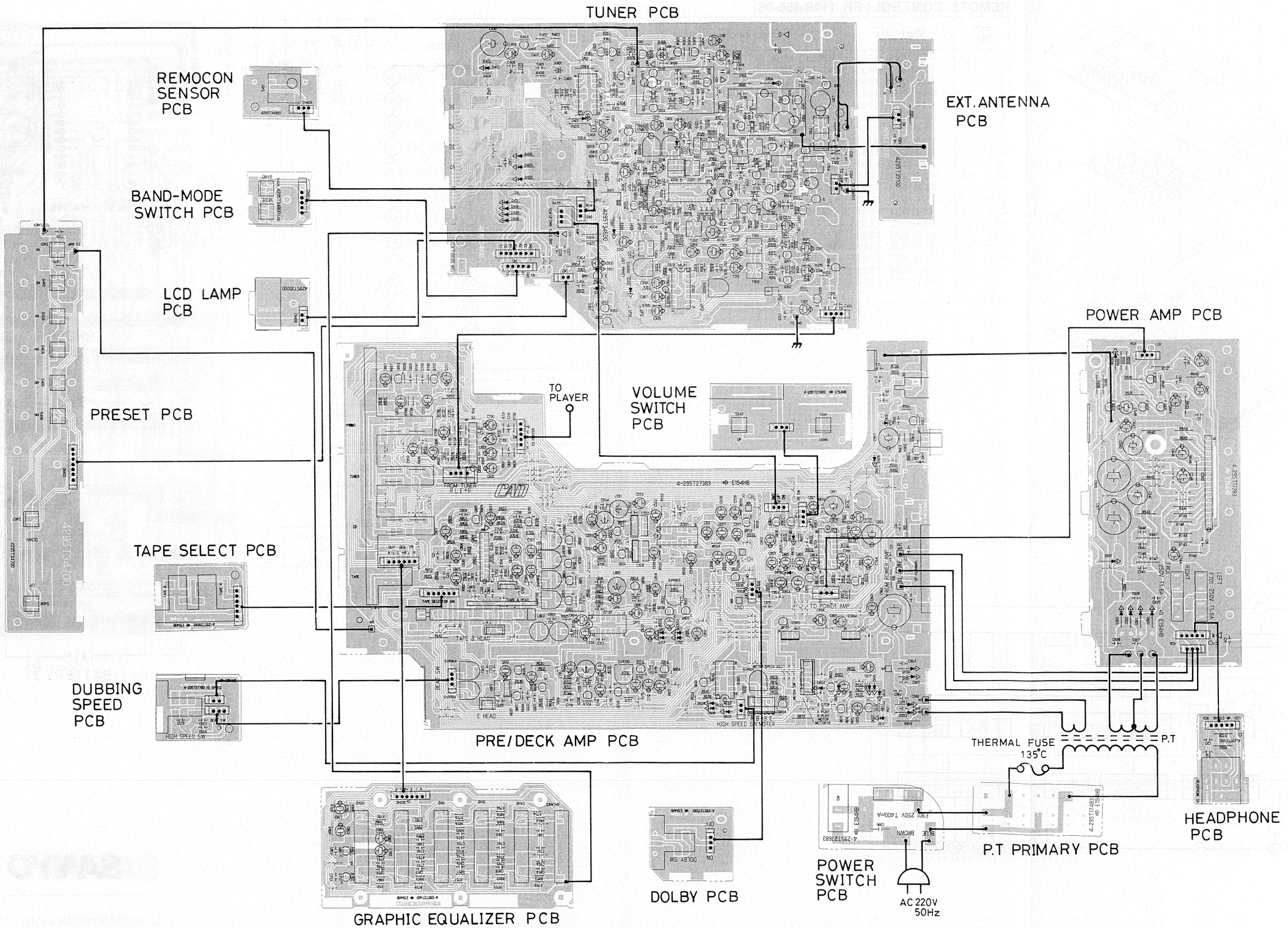


GRAPHIC EQUALIZER PCB

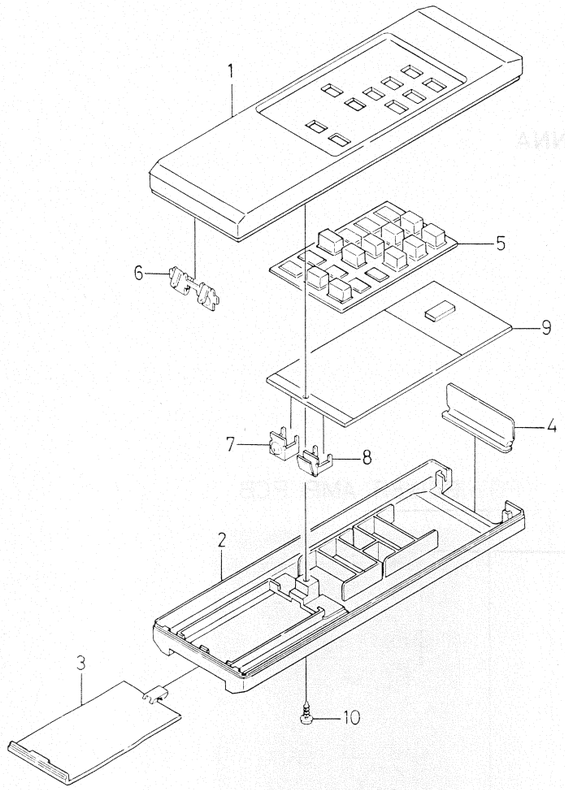


VOLUME SWITCH PCB




TUNER PCB
REMOCON SENSOR PCB
BAND-MODE SWITCH PCB
LCD LAMP PCB
EXT. ANTENNA PCB
POWER AMP PCB
PRESET PCB
TO PLAYER
VOLUME SWITCH PCB
TAPE SELECT PCB
DUBBING SPEED PCB
PRE/DECK AMP PCB
THERMAL FUSE 135°C
P.T
HEADPHONE PCB
P.T PRIMARY PCB
POWER SWITCH PCB
AC 220V 50Hz
GRAPHIC EQUALIZER PCB
DOLBY PCB

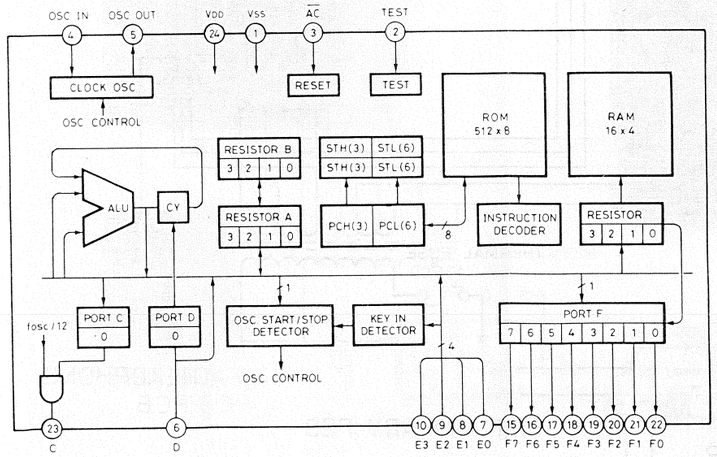
EXPLODED VIEW & PARTS LIST (REMOTE CONTROLLER . . . RB848)



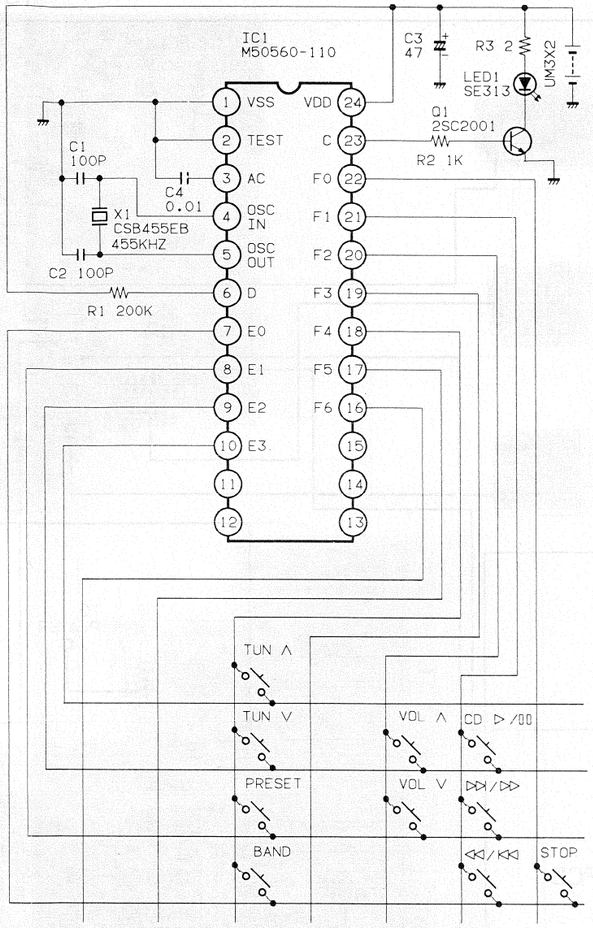
REMOTE CONTROLLER (149-456-06)

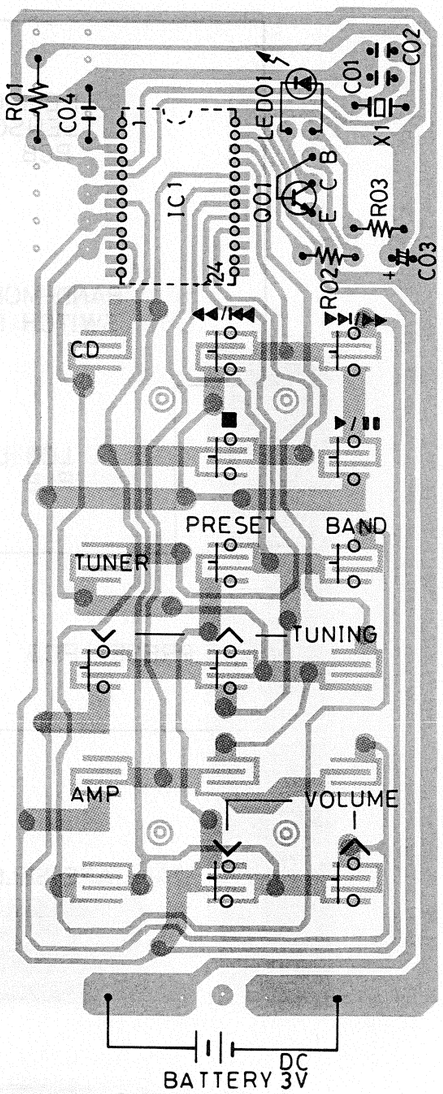
Ref. No.	Part No.	Description
1	614 199 4635	TOP LID ASSY
2	614 193 0435	BOTTOM LID
3	614 193 3559	BATTERY LID
4	614 193 3641	SIGN WINDOW
5	614 196 6120	PUSH BUTTON
6	614 194 0113	TERMINAL
7	614 194 0144	TERMINAL
8	614 194 0151	TERMINAL
9	614 199 3843	P.C BOARD
X1	614 199 8459	CERAMIC RESONATOR CSB455E
IC1	409 121 0201	IC M50560-110FP
Q1	406 004 6206	TR 2SC2001
LED1	408 005 2102	LED SE313
C1	404 032 6106	CAPACITOR 100P K 50V
C3	404 032 6205	ELECT 47U M 10V
C4	404 034 8306	CAPACITOR 0.01U Z 50V
R1	402 035 8806	RESISTOR 200K J- 1/5W
R2	402 035 8707	RESISTOR 1K J- 1/5W
R3	402 035 3405	RESISTOR 2 J- 1/5W
10	411 104 7008	SCR S-TPG BIN 2X5

IC1 M50560-110FP



SCHEMATIC & WIRING DIAGRAM (REMOTE CONTROLLER . . . RB848)





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